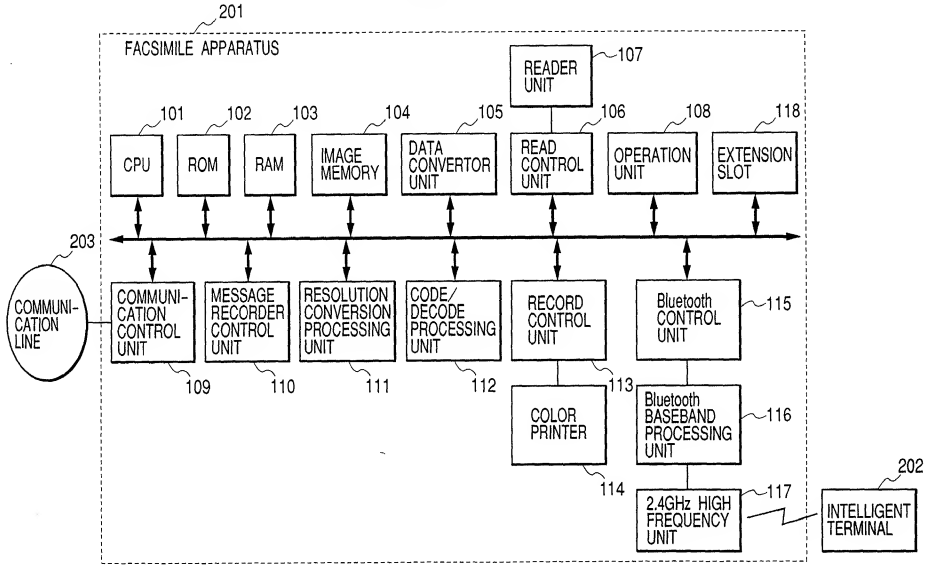
FIG. 1


201
FACSIMILE APPARATUS
READER UNIT
107
101
CPU
102
ROM
103
RAM
104
IMAGE MEMORY
105
DATA CONVERTOR UNIT
106
READ CONTROL UNIT
108
OPERATION UNIT
118
EXTENSION SLOT
203
COMMUNI-CATION LINE
COMMUNI-CATION CONTROL UNIT
109
MESSAGE RECORDER CONTROL UNIT
110
RESOLUTION CONVERSION PROCESSING UNIT
111
CODE/ DECODE PROCESSING UNIT
112
RECORD CONTROL UNIT
113
Bluetooth CONTROL UNIT
115
COLOR PRINTER
114
Bluetooth BASEBAND PROCESSING UNIT
116
2.4GHz HIGH FREQUENCY UNIT
117
202
INTELLIGENT TERMINAL

TOSHIBA 00056640

FIG. 2

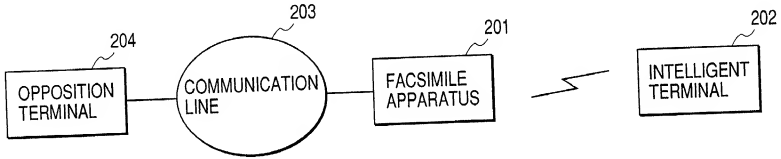


FIG. 3

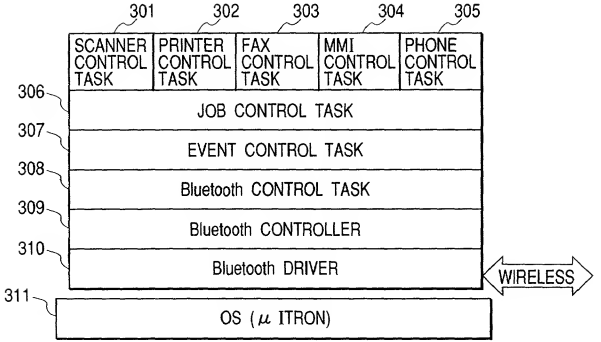

301
302
303
304
305
SCANNER CONTROL TASK
PRINTER CONTROL TASK
FAX CONTROL TASK
MMI CONTROL TASK
PHONE CONTROL TASK
306
JOB CONTROL TASK
307
EVENT CONTROL TASK
308
Bluetooth CONTROL TASK
309
Bluetooth CONTROLLER
310
Bluetooth DRIVER
WIRELESS
311
OS (μ ITRON)

FIG. 4

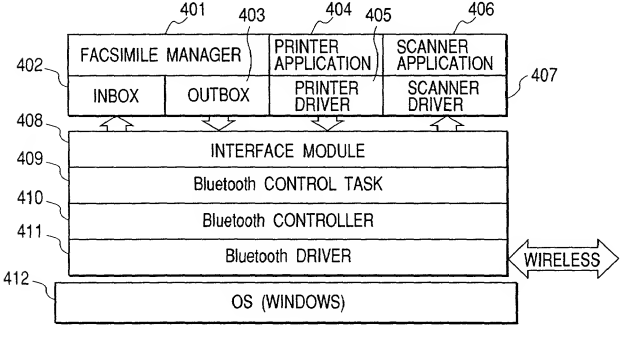

401
403
404
405
406
FACSIMILE MANAGER
PRINTER APPLICATION
SCANNER APPLICATION
402
INBOX
OUTBOX
PRINTER DRIVER
SCANNER DRIVER
407
408
INTERFACE MODULE
409
Bluetooth CONTROL TASK
410
Bluetooth CONTROLLER
411
Bluetooth DRIVER
WIRELESS
412
OS (WINDOWS)

FIG. 5

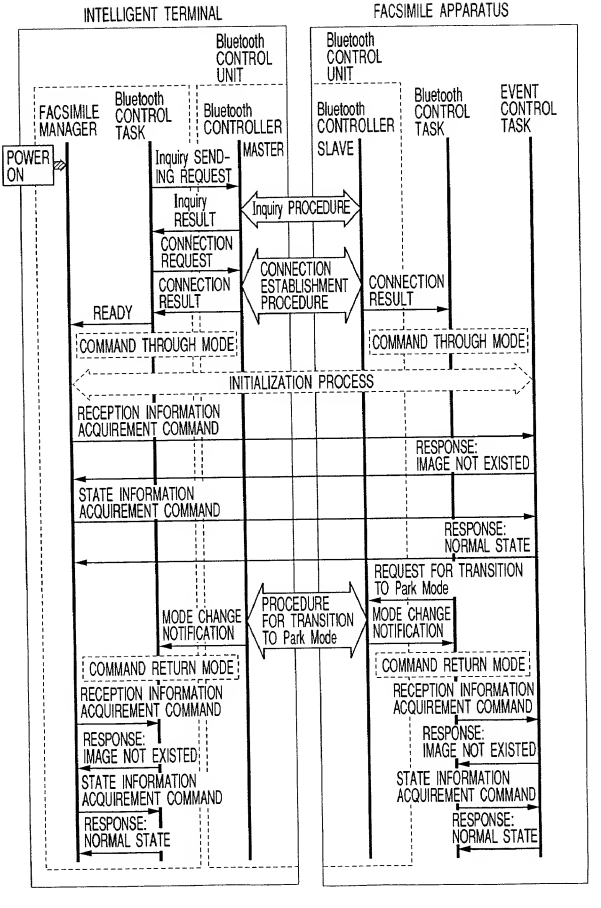

INTELLIGENT TERMINAL
FACSIMILE APPARATUS
Bluetooth CONTROL UNIT
Bluetooth CONTROL UNIT
FACSIMILE MANAGER
Bluetooth CONTROL TASK
Bluetooth CONTROLLER
Bluetooth CONTROLLER
Bluetooth CONTROL TASK
EVENT CONTROL TASK
POWER ON
MASTER
SLAVE
Inquiry SENDING REQUEST
Inquiry RESULT
Inquiry PROCEDURE
CONNECTION REQUEST
CONNECTION RESULT
CONNECTION ESTABLISHMENT PROCEDURE
CONNECTION RESULT
READY
COMMAND THROUGH MODE
COMMAND THROUGH MODE
INITIALIZATION PROCESS
RECEPTION INFORMATION ACQUIREMENT COMMAND
RESPONSE: IMAGE NOT EXISTED
STATE INFORMATION ACQUIREMENT COMMAND
RESPONSE: NORMAL STATE
REQUEST FOR TRANSITION TO Park Mode
MODE CHANGE NOTIFICATION
PROCEDURE FOR TRANSITION TO Park Mode
MODE CHANGE NOTIFICATION
COMMAND RETURN MODE
COMMAND RETURN MODE
RECEPTION INFORMATION ACQUIREMENT COMMAND
RESPONSE: IMAGE NOT EXISTED
STATE INFORMATION ACQUIREMENT COMMAND
RESPONSE: NORMAL STATE
RECEPTION INFORMATION ACQUIREMENT COMMAND
RESPONSE: IMAGE NOT EXISTED
STATE INFORMATION ACQUIREMENT COMMAND
RESPONSE: NORMAL STATE

FIG. 6

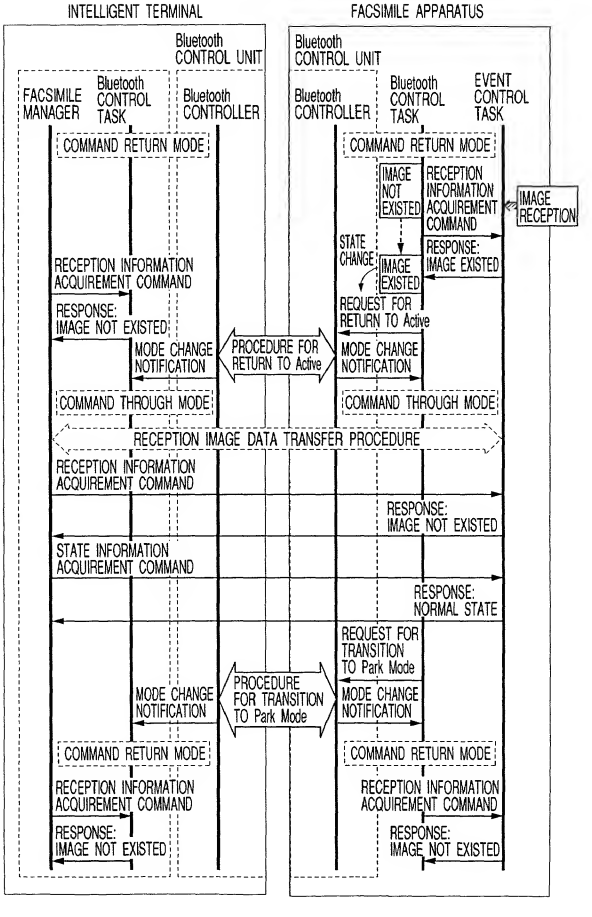

INTELLIGENT TERMINAL
FACSIMILE APPARATUS
Bluetooth CONTROL UNIT
FACSIMILE MANAGER
Bluetooth CONTROL TASK
Bluetooth CONTROLLER
EVENT CONTROL TASK
COMMAND RETURN MODE
IMAGE NOT EXISTED
RECEPTION INFORMATION ACQUIREMENT COMMAND
IMAGE RECEPTION
STATE CHANGE
IMAGE EXISTED
RESPONSE: IMAGE EXISTED
REQUEST FOR RETURN TO Active
RECEPTION INFORMATION ACQUIREMENT COMMAND
RESPONSE: IMAGE NOT EXISTED
MODE CHANGE NOTIFICATION
PROCEDURE FOR RETURN TO Active
COMMAND THROUGH MODE
RECEPTION IMAGE DATA TRANSFER PROCEDURE
STATE INFORMATION ACQUIREMENT COMMAND
RESPONSE: NORMAL STATE
REQUEST FOR TRANSITION TO Park Mode
PROCEDURE FOR TRANSITION TO Park Mode

FIG. 7

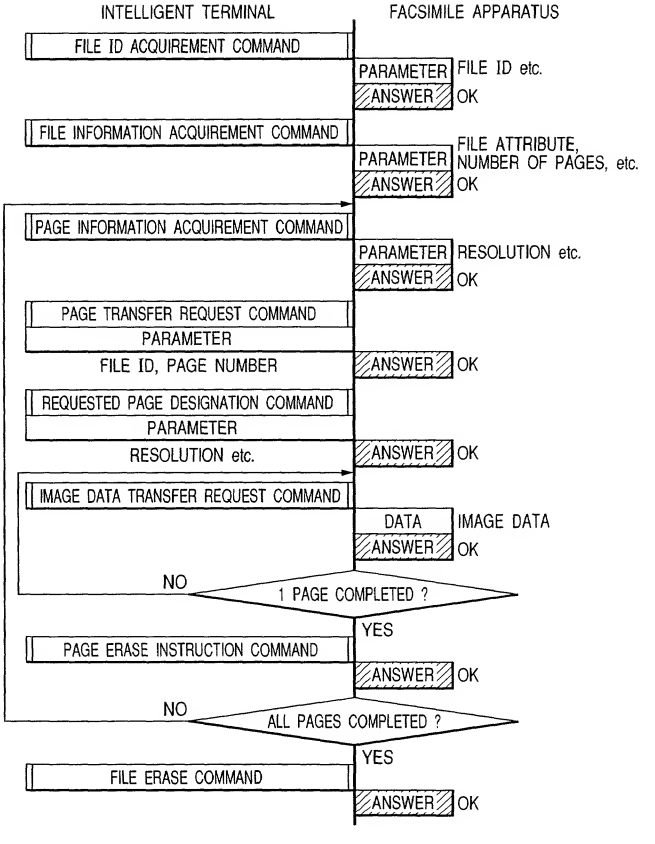

INTELLIGENT TERMINAL
FACSIMILE APPARATUS
FILE ID ACQUIREMENT COMMAND
PARAMETER
FILE ID etc.
ANSWER
OK
FILE INFORMATION ACQUIREMENT COMMAND
PARAMETER
FILE ATTRIBUTE, NUMBER OF PAGES, etc.
ANSWER
OK
PAGE INFORMATION ACQUIREMENT COMMAND
PARAMETER
RESOLUTION etc.
ANSWER
OK
PAGE TRANSFER REQUEST COMMAND
PARAMETER
FILE ID, PAGE NUMBER
ANSWER
OK
REQUESTED PAGE DESIGNATION COMMAND
PARAMETER
RESOLUTION etc.
ANSWER
OK
IMAGE DATA TRANSFER REQUEST COMMAND
DATA
IMAGE DATA
ANSWER
OK
NO
1 PAGE COMPLETED ?
YES
PAGE ERASE INSTRUCTION COMMAND
ANSWER
OK
NO
ALL PAGES COMPLETED ?
YES
FILE ERASE COMMAND
ANSWER
OK

FIG. 8

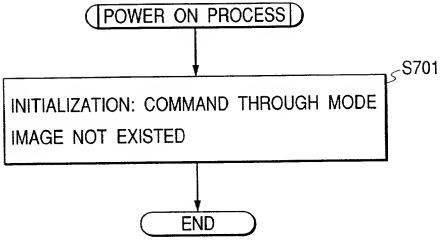

POWER ON PROCESS
S701
INITIALIZATION: COMMAND THROUGH MODE
IMAGE NOT EXISTED
END

FIG. 9

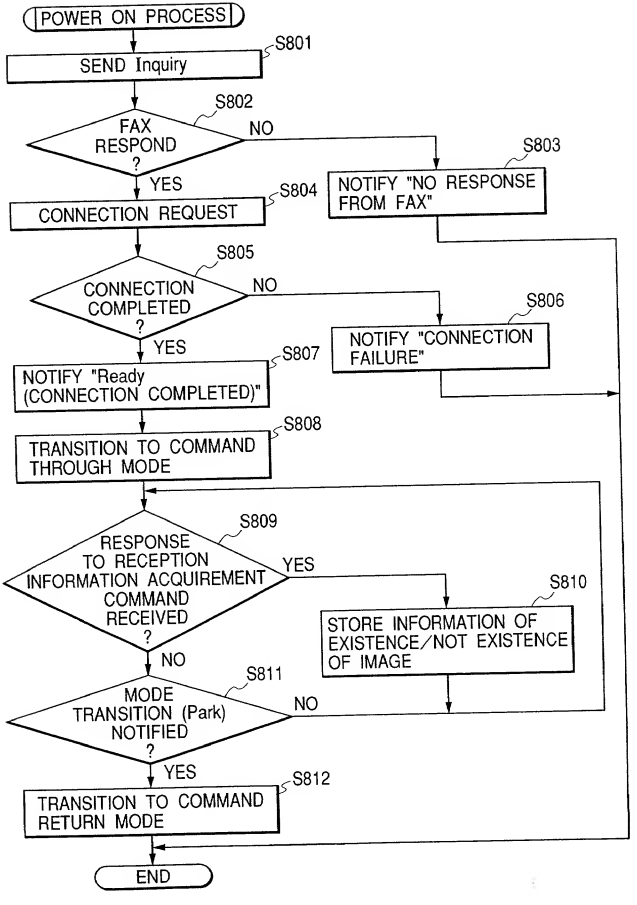

POWER ON PROCESS
S801
SEND Inquiry
S802
FAX RESPOND ?
NO
YES
S803
NOTIFY "NO RESPONSE FROM FAX"
S804
CONNECTION REQUEST
S805
CONNECTION COMPLETED ?
NO
YES
S806
NOTIFY "CONNECTION FAILURE"
S807
NOTIFY "Ready (CONNECTION COMPLETED)"
S808
TRANSITION TO COMMAND THROUGH MODE
S809
RESPONSE TO RECEPTION INFORMATION ACQUIREMENT COMMAND RECEIVED ?
YES
NO
S810
STORE INFORMATION OF EXISTENCE/NOT EXISTENCE OF IMAGE
S811
MODE TRANSITION (Park) NOTIFIED ?
NO
YES
S812
TRANSITION TO COMMAND RETURN MODE
END

FIG. 10

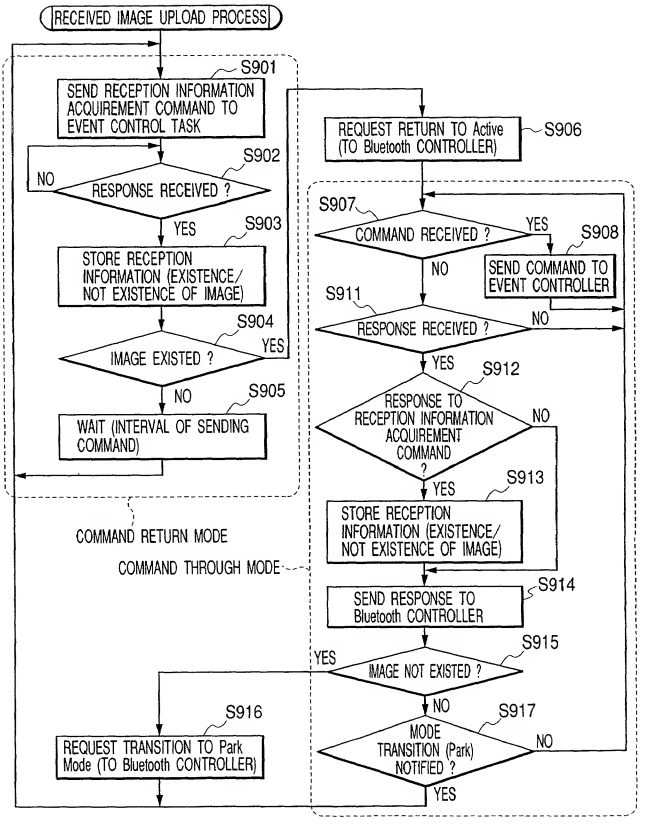

RECEIVED IMAGE UPLOAD PROCESS
S901
SEND RECEPTION INFORMATION ACQUIREMENT COMMAND TO EVENT CONTROL TASK
S902
RESPONSE RECEIVED ?
NO
YES
S903
STORE RECEPTION INFORMATION (EXISTENCE/ NOT EXISTENCE OF IMAGE)
S904
IMAGE EXISTED ?
YES
NO
S905
WAIT (INTERVAL OF SENDING COMMAND)
COMMAND RETURN MODE
COMMAND THROUGH MODE
S906
REQUEST RETURN TO Active (TO Bluetooth CONTROLLER)
S907
COMMAND RECEIVED ?
YES
S908
SEND COMMAND TO EVENT CONTROLLER
NO
S911
RESPONSE RECEIVED ?
NO
YES
S912
RESPONSE TO RECEPTION INFORMATION ACQUIREMENT COMMAND ?
NO
YES
S913
STORE RECEPTION INFORMATION (EXISTENCE/ NOT EXISTENCE OF IMAGE)
S914
SEND RESPONSE TO Bluetooth CONTROLLER
S915
IMAGE NOT EXISTED ?
YES
NO
S916
REQUEST TRANSITION TO Park Mode (TO Bluetooth CONTROLLER)
S917
MODE TRANSITION (Park) NOTIFIED ?
NO
YES

FIG. 11

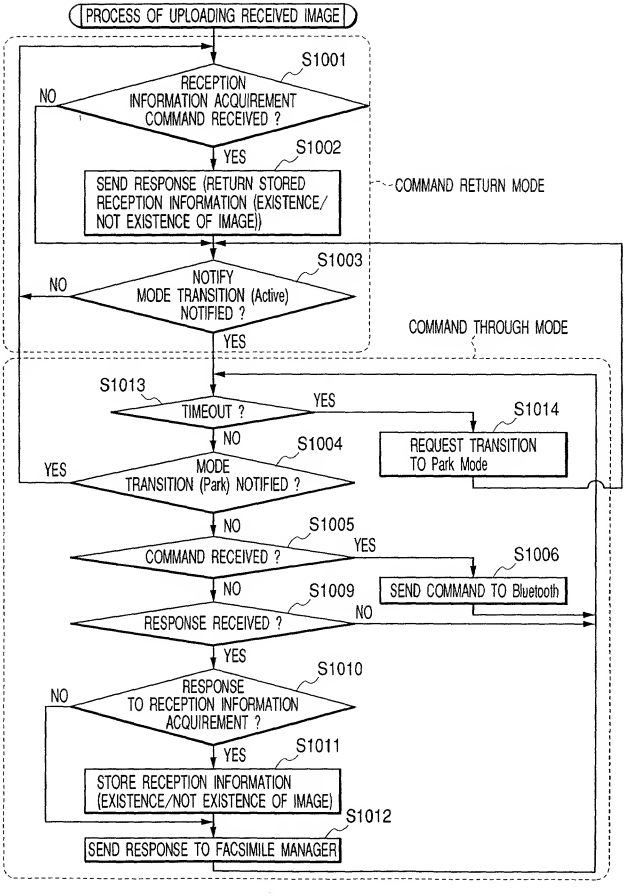

PROCESS OF UPLOADING RECEIVED IMAGE
S1001
RECEPTION INFORMATION ACQUIREMENT COMMAND RECEIVED ?
NO
YES
S1002
SEND RESPONSE (RETURN STORED RECEPTION INFORMATION (EXISTENCE/ NOT EXISTENCE OF IMAGE))
COMMAND RETURN MODE
S1003
NOTIFY MODE TRANSITION (Active) NOTIFIED ?
NO
YES
COMMAND THROUGH MODE
S1013
TIMEOUT ?
YES
S1014
REQUEST TRANSITION TO Park Mode
NO
S1004
MODE TRANSITION (Park) NOTIFIED ?
YES
NO
S1005
COMMAND RECEIVED ?
YES
S1006
SEND COMMAND TO Bluetooth
NO
S1009
RESPONSE RECEIVED ?
NO
YES
S1010
RESPONSE TO RECEPTION INFORMATION ACQUIREMENT ?
NO
YES
S1011
STORE RECEPTION INFORMATION (EXISTENCE/NOT EXISTENCE OF IMAGE)
S1012
SEND RESPONSE TO FACSIMILE MANAGER

FIG. 12

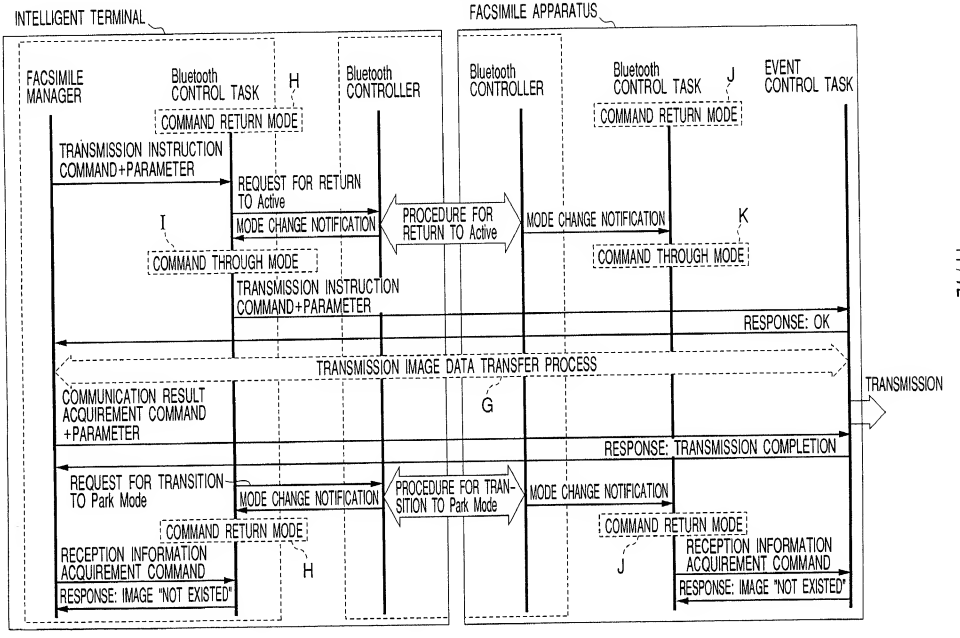

INTELLIGENT TERMINAL
FACSIMILE APPARATUS
FACSIMILE MANAGER
Bluetooth CONTROL TASK
H
Bluetooth CONTROLLER
Bluetooth CONTROLLER
Bluetooth CONTROL TASK
J
EVENT CONTROL TASK
COMMAND RETURN MODE
COMMAND RETURN MODE
TRANSMISSION INSTRUCTION COMMAND+PARAMETER
REQUEST FOR RETURN TO Active
MODE CHANGE NOTIFICATION
PROCEDURE FOR RETURN TO Active
MODE CHANGE NOTIFICATION
K
I
COMMAND THROUGH MODE
COMMAND THROUGH MODE
TRANSMISSION INSTRUCTION COMMAND+PARAMETER
RESPONSE: OK
TRANSMISSION IMAGE DATA TRANSFER PROCESS
TRANSMISSION
COMMUNICATION RESULT ACQUIREMENT COMMAND +PARAMETER
G
RESPONSE: TRANSMISSION COMPLETION
REQUEST FOR TRANSITION TO Park Mode
MODE CHANGE NOTIFICATION
PROCEDURE FOR TRANSITION TO Park Mode
MODE CHANGE NOTIFICATION
COMMAND RETURN MODE
COMMAND RETURN MODE
RECEPTION INFORMATION ACQUIREMENT COMMAND
H
J
RECEPTION INFORMATION ACQUIREMENT COMMAND
RESPONSE: IMAGE "NOT EXISTED"
RESPONSE: IMAGE "NOT EXISTED"

FIG. 13

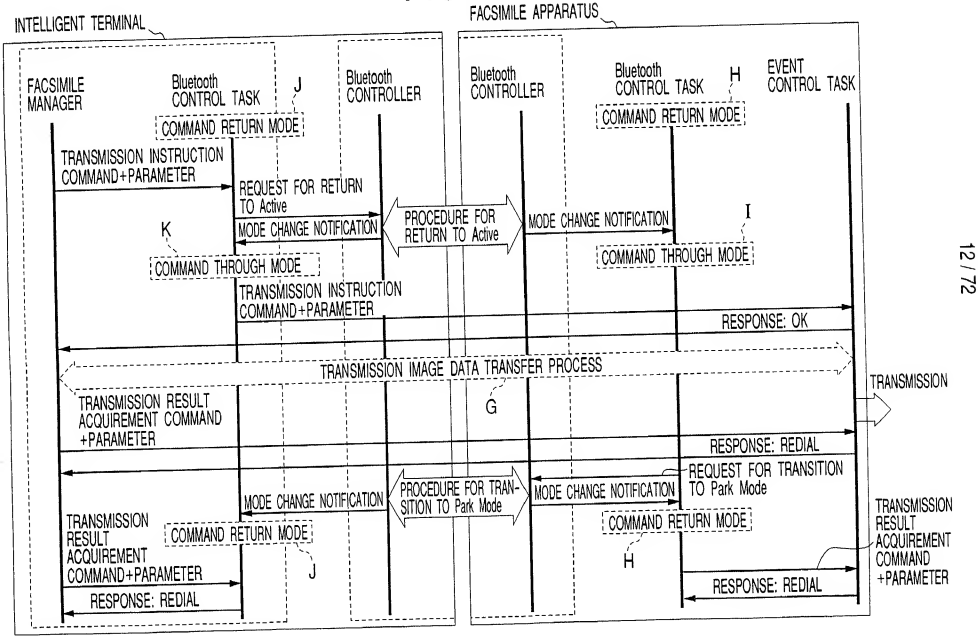

INTELLIGENT TERMINAL
FACSIMILE APPARATUS
FACSIMILE MANAGER
Bluetooth CONTROL TASK
J
Bluetooth CONTROLLER
Bluetooth CONTROLLER
Bluetooth CONTROL TASK
H
EVENT CONTROL TASK
COMMAND RETURN MODE
COMMAND RETURN MODE
TRANSMISSION INSTRUCTION COMMAND+PARAMETER
REQUEST FOR RETURN TO Active
MODE CHANGE NOTIFICATION
PROCEDURE FOR RETURN TO Active
MODE CHANGE NOTIFICATION
I
K
COMMAND THROUGH MODE
COMMAND THROUGH MODE
TRANSMISSION INSTRUCTION COMMAND+PARAMETER
RESPONSE: OK
TRANSMISSION IMAGE DATA TRANSFER PROCESS
TRANSMISSION
TRANSMISSION RESULT ACQUIREMENT COMMAND +PARAMETER
G
RESPONSE: REDIAL
REQUEST FOR TRANSITION TO Park Mode
MODE CHANGE NOTIFICATION
PROCEDURE FOR TRANSITION TO Park Mode
MODE CHANGE NOTIFICATION
TRANSMISSION RESULT ACQUIREMENT COMMAND +PARAMETER
COMMAND RETURN MODE
COMMAND RETURN MODE
J
H
TRANSMISSION RESULT ACQUIREMENT COMMAND +PARAMETER
RESPONSE: REDIAL
RESPONSE: REDIAL

FIG. 14

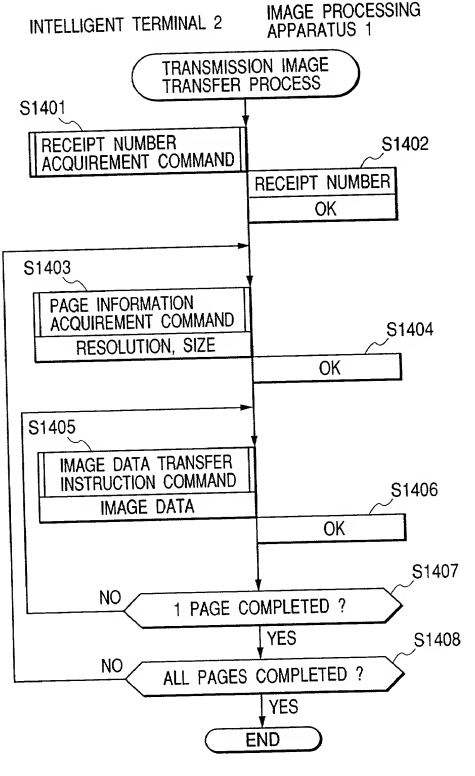

INTELLIGENT TERMINAL 2
IMAGE PROCESSING APPARATUS 1
TRANSMISSION IMAGE TRANSFER PROCESS
S1401
RECEIPT NUMBER ACQUIREMENT COMMAND
S1402
RECEIPT NUMBER
OK
S1403
PAGE INFORMATION ACQUIREMENT COMMAND
RESOLUTION, SIZE
S1404
OK
S1405
IMAGE DATA TRANSFER INSTRUCTION COMMAND
IMAGE DATA
S1406
OK
S1407
NO
1 PAGE COMPLETED ?
YES
S1408
NO
ALL PAGES COMPLETED ?
YES
END

FIG. 15

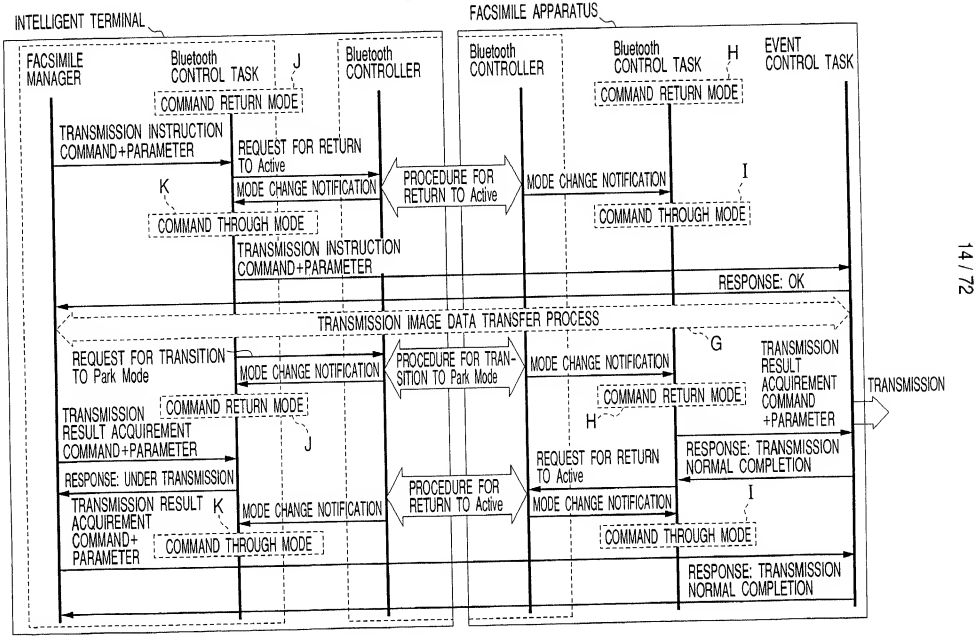

INTELLIGENT TERMINAL
FACSIMILE APPARATUS
FACSIMILE MANAGER
Bluetooth CONTROL TASK
Bluetooth CONTROLLER
Bluetooth CONTROLLER
Bluetooth CONTROL TASK
EVENT CONTROL TASK
J
H
COMMAND RETURN MODE
COMMAND RETURN MODE
TRANSMISSION INSTRUCTION COMMAND+PARAMETER
REQUEST FOR RETURN TO Active
PROCEDURE FOR RETURN TO Active
MODE CHANGE NOTIFICATION
MODE CHANGE NOTIFICATION
K
I
COMMAND THROUGH MODE
COMMAND THROUGH MODE
TRANSMISSION INSTRUCTION COMMAND+PARAMETER
RESPONSE: OK
TRANSMISSION IMAGE DATA TRANSFER PROCESS
G
REQUEST FOR TRANSITION TO Park Mode
MODE CHANGE NOTIFICATION
PROCEDURE FOR TRANSITION TO Park Mode
MODE CHANGE NOTIFICATION
TRANSMISSION RESULT ACQUIREMENT COMMAND +PARAMETER
TRANSMISSION
COMMAND RETURN MODE
COMMAND RETURN MODE
H
TRANSMISSION RESULT ACQUIREMENT COMMAND+PARAMETER
J
RESPONSE: TRANSMISSION NORMAL COMPLETION
RESPONSE: UNDER TRANSMISSION
REQUEST FOR RETURN TO Active
TRANSMISSION RESULT ACQUIREMENT COMMAND+ PARAMETER
K
MODE CHANGE NOTIFICATION
PROCEDURE FOR RETURN TO Active
MODE CHANGE NOTIFICATION
I
COMMAND THROUGH MODE
COMMAND THROUGH MODE
RESPONSE: TRANSMISSION NORMAL COMPLETION

FIG. 16

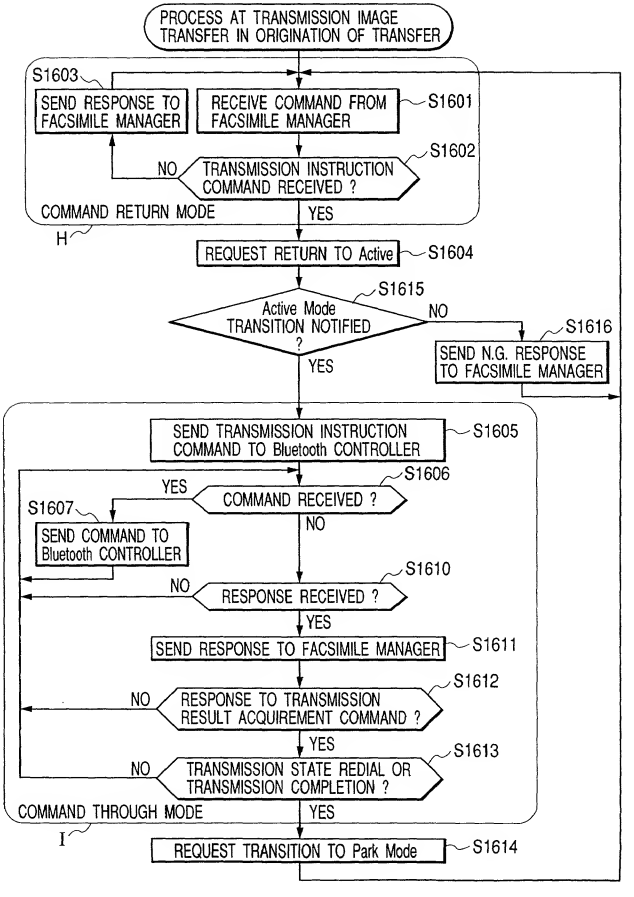

PROCESS AT TRANSMISSION IMAGE TRANSFER IN ORIGINATION OF TRANSFER
S1603
SEND RESPONSE TO FACSIMILE MANAGER
RECEIVE COMMAND FROM FACSIMILE MANAGER
S1601
S1602
NO
TRANSMISSION INSTRUCTION COMMAND RECEIVED ?
COMMAND RETURN MODE
H
YES
REQUEST RETURN TO Active
S1604
S1615
Active Mode TRANSITION NOTIFIED ?
NO
S1616
SEND N.G. RESPONSE TO FACSIMILE MANAGER
YES
SEND TRANSMISSION INSTRUCTION COMMAND TO Bluetooth CONTROLLER
S1605
S1606
YES
COMMAND RECEIVED ?
S1607
SEND COMMAND TO Bluetooth CONTROLLER
NO
S1610
NO
RESPONSE RECEIVED ?
YES
SEND RESPONSE TO FACSIMILE MANAGER
S1611
S1612
NO
RESPONSE TO TRANSMISSION RESULT ACQUIREMENT COMMAND ?
YES
S1613
NO
TRANSMISSION STATE REDIAL OR TRANSMISSION COMPLETION ?
COMMAND THROUGH MODE
I
YES
REQUEST TRANSITION TO Park Mode
S1614

FIG. 17

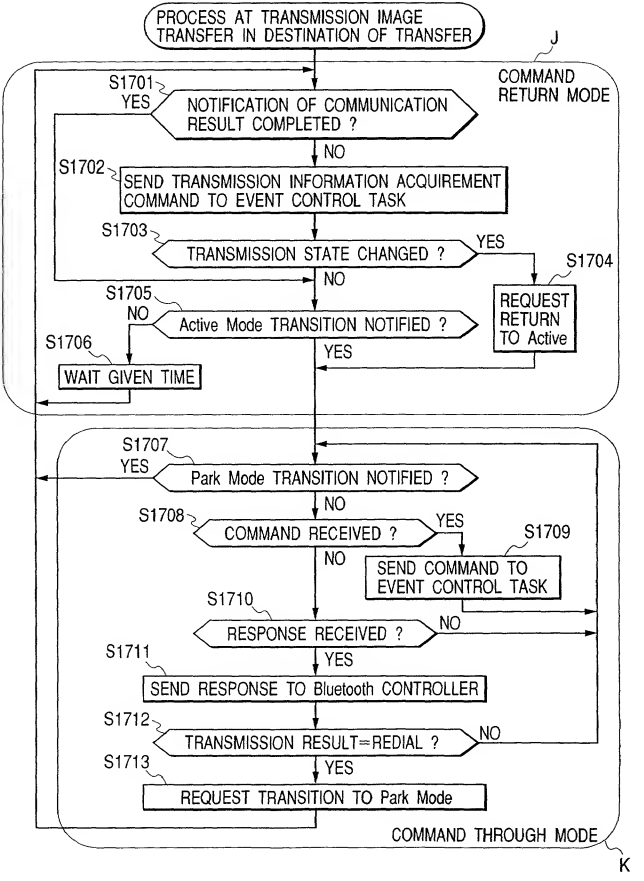
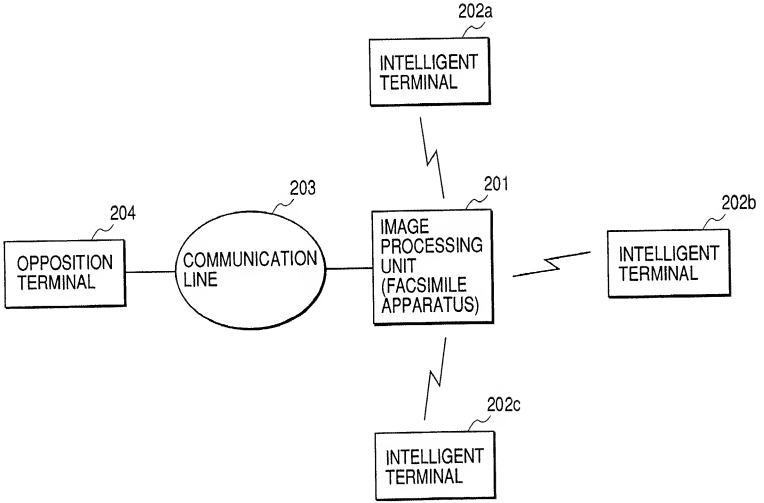

PROCESS AT TRANSMISSION IMAGE TRANSFER IN DESTINATION OF TRANSFER
J
COMMAND RETURN MODE
S1701
YES
NOTIFICATION OF COMMUNICATION RESULT COMPLETED ?
NO
S1702
SEND TRANSMISSION INFORMATION ACQUIREMENT COMMAND TO EVENT CONTROL TASK
S1703
TRANSMISSION STATE CHANGED ?
YES
S1704
REQUEST RETURN TO Active
NO
S1705
NO
Active Mode TRANSITION NOTIFIED ?
S1706
YES
WAIT GIVEN TIME
S1707
YES
Park Mode TRANSITION NOTIFIED ?
NO
S1708
COMMAND RECEIVED ?
YES
S1709
NO
SEND COMMAND TO EVENT CONTROL TASK
S1710
RESPONSE RECEIVED ?
NO
S1711
YES
SEND RESPONSE TO Bluetooth CONTROLLER
S1712
TRANSMISSION RESULT=REDIAL ?
NO
S1713
YES
REQUEST TRANSITION TO Park Mode
COMMAND THROUGH MODE
K

FIG. 18


202a
INTELLIGENT TERMINAL
203
201
204
202b
OPPOSITION TERMINAL
COMMUNICATION LINE
IMAGE PROCESSING UNIT (FACSIMILE APPARATUS)
INTELLIGENT TERMINAL
202c
INTELLIGENT TERMINAL

EUROPEAN SEARCH

FIG. 19

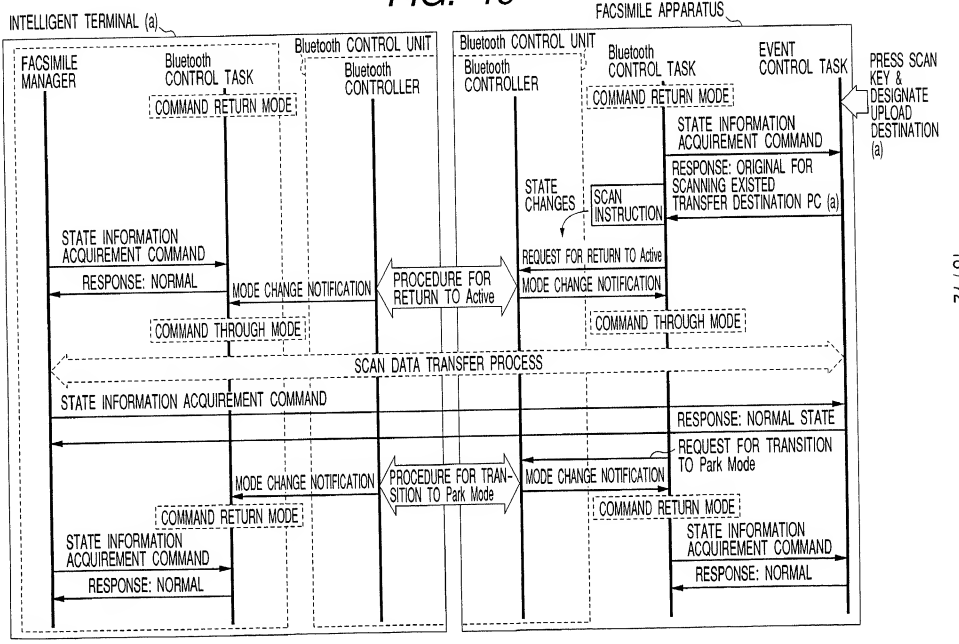


FIG. 20

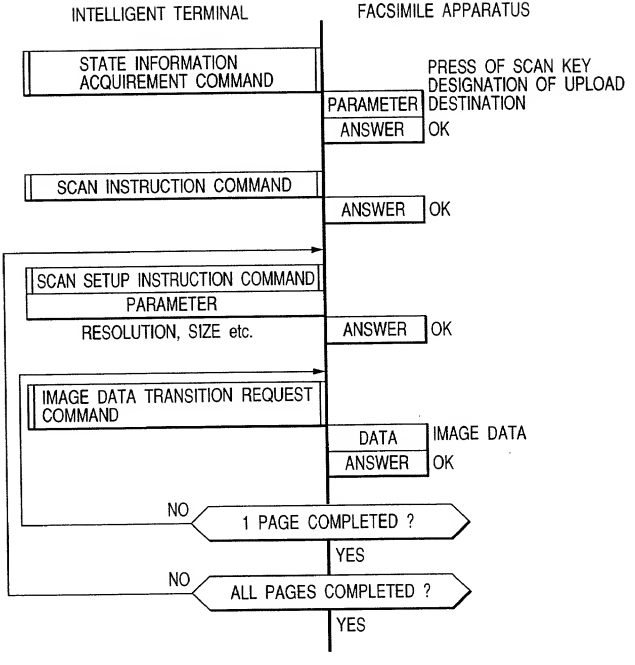

INTELLIGENT TERMINAL
FACSIMILE APPARATUS
STATE INFORMATION ACQUIREMENT COMMAND
PRESS OF SCAN KEY
DESIGNATION OF UPLOAD DESTINATION
PARAMETER
ANSWER
OK
SCAN INSTRUCTION COMMAND
ANSWER
OK
SCAN SETUP INSTRUCTION COMMAND
PARAMETER
RESOLUTION, SIZE etc.
ANSWER
OK
IMAGE DATA TRANSITION REQUEST COMMAND
DATA
IMAGE DATA
ANSWER
OK
NO
1 PAGE COMPLETED ?
YES
NO
ALL PAGES COMPLETED ?
YES

FIG. 21

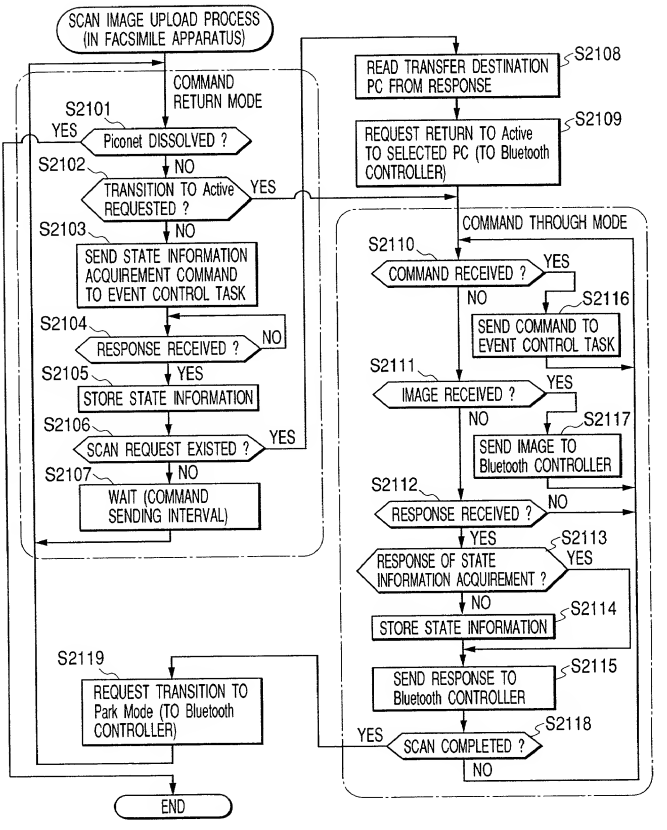

SCAN IMAGE UPLOAD PROCESS (IN FACSIMILE APPARATUS)
COMMAND RETURN MODE
S2101
Piconet DISSOLVED ?
YES
NO
S2102
TRANSITION TO Active REQUESTED ?
YES
NO
S2103
SEND STATE INFORMATION ACQUIREMENT COMMAND TO EVENT CONTROL TASK
S2104
RESPONSE RECEIVED ?
NO
YES
S2105
STORE STATE INFORMATION
S2106
SCAN REQUEST EXISTED ?
YES
NO
S2107
WAIT (COMMAND SENDING INTERVAL)
S2119
REQUEST TRANSITION TO Park Mode (TO Bluetooth CONTROLLER)
END
READ TRANSFER DESTINATION PC FROM RESPONSE
S2108
REQUEST RETURN TO Active TO SELECTED PC (TO Bluetooth CONTROLLER)
S2109
COMMAND THROUGH MODE
S2110
COMMAND RECEIVED ?
YES
NO
S2116
SEND COMMAND TO EVENT CONTROL TASK
S2111
IMAGE RECEIVED ?
YES
NO
S2117
SEND IMAGE TO Bluetooth CONTROLLER
S2112
RESPONSE RECEIVED ?
NO
YES
S2113
RESPONSE OF STATE INFORMATION ACQUIREMENT ?
YES
NO
S2114
STORE STATE INFORMATION
S2115
SEND RESPONSE TO Bluetooth CONTROLLER
S2118
SCAN COMPLETED ?
YES
NO

FIG. 22

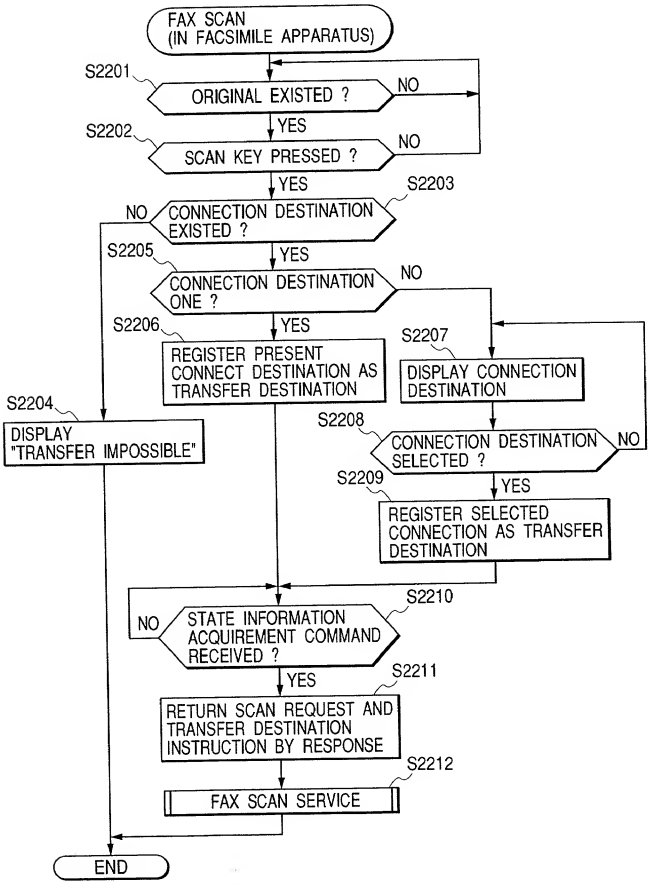

FAX SCAN
(IN FACSIMILE APPARATUS)
S2201
ORIGINAL EXISTED ?
NO
YES
S2202
SCAN KEY PRESSED ?
NO
YES
S2203
NO
CONNECTION DESTINATION EXISTED ?
S2205
YES
CONNECTION DESTINATION ONE ?
NO
YES
S2206
REGISTER PRESENT CONNECT DESTINATION AS TRANSFER DESTINATION
S2207
DISPLAY CONNECTION DESTINATION
S2204
DISPLAY "TRANSFER IMPOSSIBLE"
S2208
CONNECTION DESTINATION SELECTED ?
NO
S2209
YES
REGISTER SELECTED CONNECTION AS TRANSFER DESTINATION
S2210
NO
STATE INFORMATION ACQUIREMENT COMMAND RECEIVED ?
YES
S2211
RETURN SCAN REQUEST AND TRANSFER DESTINATION INSTRUCTION BY RESPONSE
S2212
FAX SCAN SERVICE
END

FIG. 23

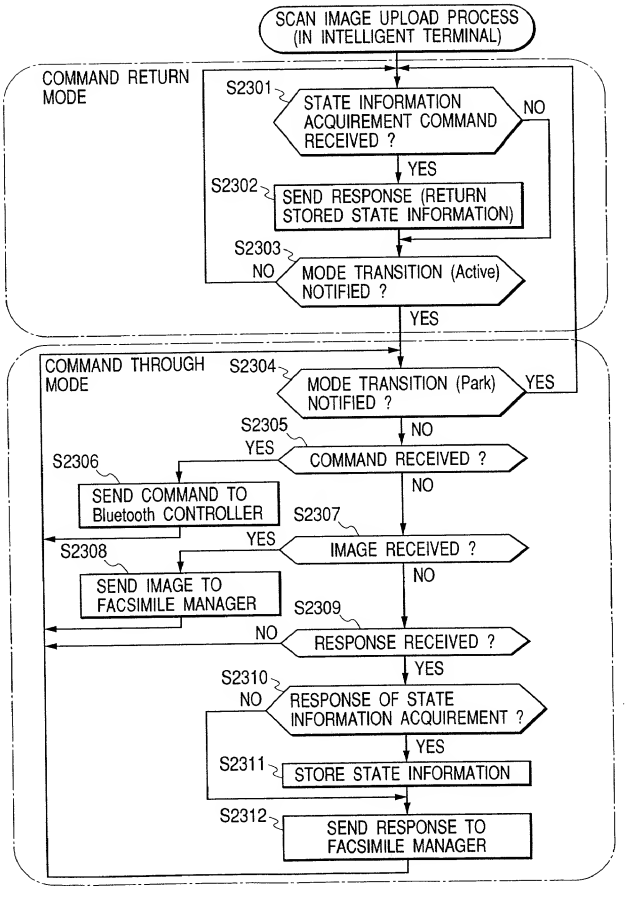

SCAN IMAGE UPLOAD PROCESS (IN INTELLIGENT TERMINAL)
COMMAND RETURN MODE
S2301
STATE INFORMATION ACQUIREMENT COMMAND RECEIVED ?
NO
YES
S2302
SEND RESPONSE (RETURN STORED STATE INFORMATION)
S2303
NO
MODE TRANSITION (Active) NOTIFIED ?
YES
COMMAND THROUGH MODE
S2304
MODE TRANSITION (Park) NOTIFIED ?
YES
NO
S2305
YES
COMMAND RECEIVED ?
S2306
SEND COMMAND TO Bluetooth CONTROLLER
NO
S2307
YES
IMAGE RECEIVED ?
S2308
SEND IMAGE TO FACSIMILE MANAGER
NO
S2309
NO
RESPONSE RECEIVED ?
YES
S2310
NO
RESPONSE OF STATE INFORMATION ACQUIREMENT ?
YES
S2311
STORE STATE INFORMATION
S2312
SEND RESPONSE TO FACSIMILE MANAGER

FIG. 24

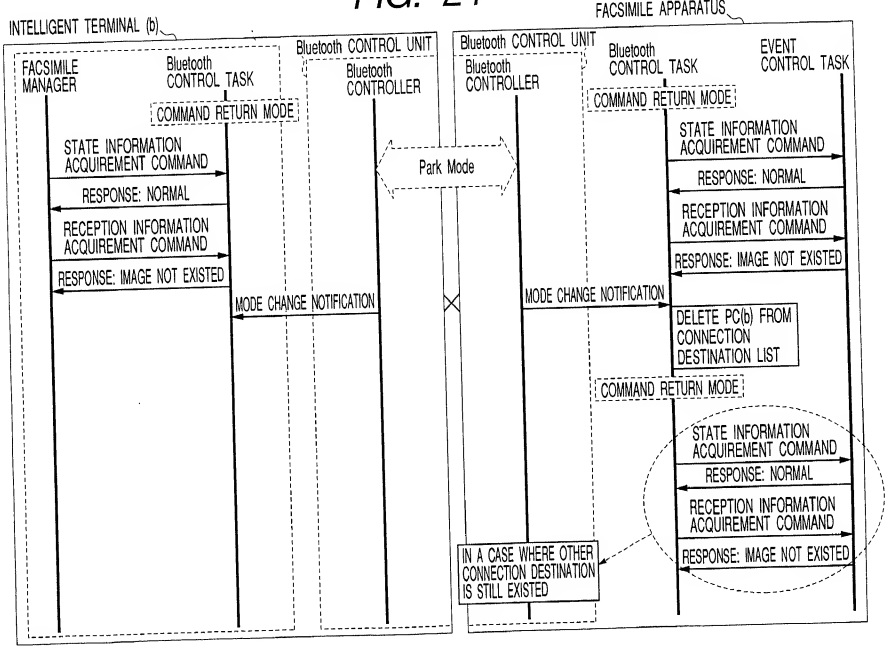

INTELLIGENT TERMINAL (b)
FACSIMILE APPARATUS
FACSIMILE MANAGER
Bluetooth CONTROL TASK
Bluetooth CONTROL UNIT
Bluetooth CONTROLLER
Bluetooth CONTROL UNIT
Bluetooth CONTROLLER
Bluetooth CONTROL TASK
EVENT CONTROL TASK
COMMAND RETURN MODE
COMMAND RETURN MODE
STATE INFORMATION ACQUIREMENT COMMAND
Park Mode
RESPONSE: NORMAL
RECEPTION INFORMATION ACQUIREMENT COMMAND
RESPONSE: IMAGE NOT EXISTED
MODE CHANGE NOTIFICATION
MODE CHANGE NOTIFICATION
DELETE PC(b) FROM CONNECTION DESTINATION LIST
COMMAND RETURN MODE
STATE INFORMATION ACQUIREMENT COMMAND
RESPONSE: NORMAL
RECEPTION INFORMATION ACQUIREMENT COMMAND
RESPONSE: IMAGE NOT EXISTED
IN A CASE WHERE OTHER CONNECTION DESTINATION IS STILL EXISTED

FIG. 25

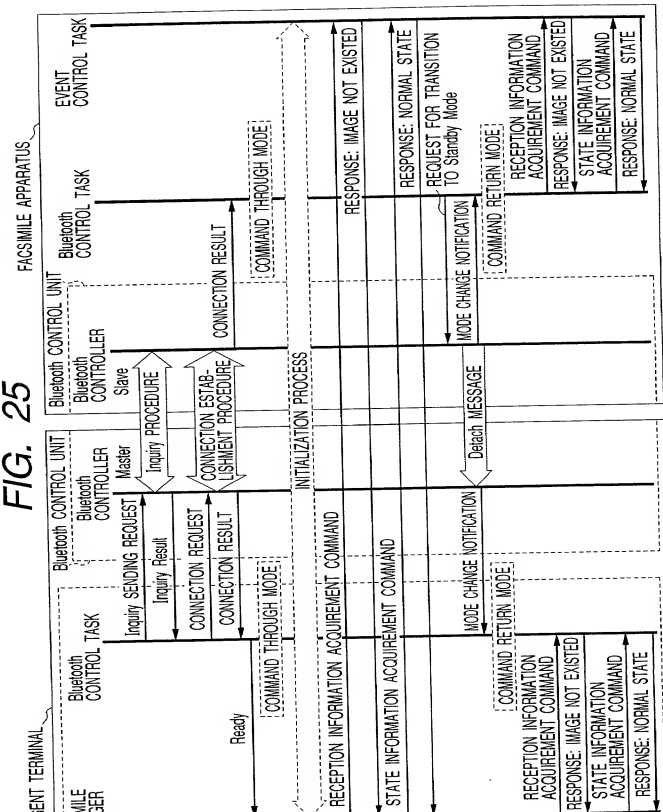

INTELLIGENT TERMINAL
FACSIMILE APPARATUS
POWER ON
FACSIMILE MANAGER
Bluetooth CONTROL TASK
Bluetooth CONTROL UNIT
Bluetooth CONTROLLER Master
Bluetooth CONTROL UNIT
Bluetooth CONTROLLER Slave
Bluetooth CONTROL TASK
EVENT CONTROL TASK
Inquiry SENDING REQUEST
Inquiry PROCEDURE
Inquiry Result
CONNECTION REQUEST
CONNECTION ESTAB-LISHMENT PROCEDURE
CONNECTION RESULT
CONNECTION RESULT
Ready
COMMAND THROUGH MODE
COMMAND THROUGH MODE
INITIALIZATION PROCESS
RECEPTION INFORMATION ACQUIREMENT COMMAND
RESPONSE: IMAGE NOT EXISTED
STATE INFORMATION ACQUIREMENT COMMAND
RESPONSE: NORMAL STATE
REQUEST FOR TRANSITION TO Standby Mode
MODE CHANGE NOTIFICATION
Detach MESSAGE
MODE CHANGE NOTIFICATION
COMMAND RETURN MODE
COMMAND RETURN MODE
RECEPTION INFORMATION ACQUIREMENT COMMAND
RESPONSE: IMAGE NOT EXISTED
STATE INFORMATION ACQUIREMENT COMMAND
RESPONSE: NORMAL STATE

FIG. 26

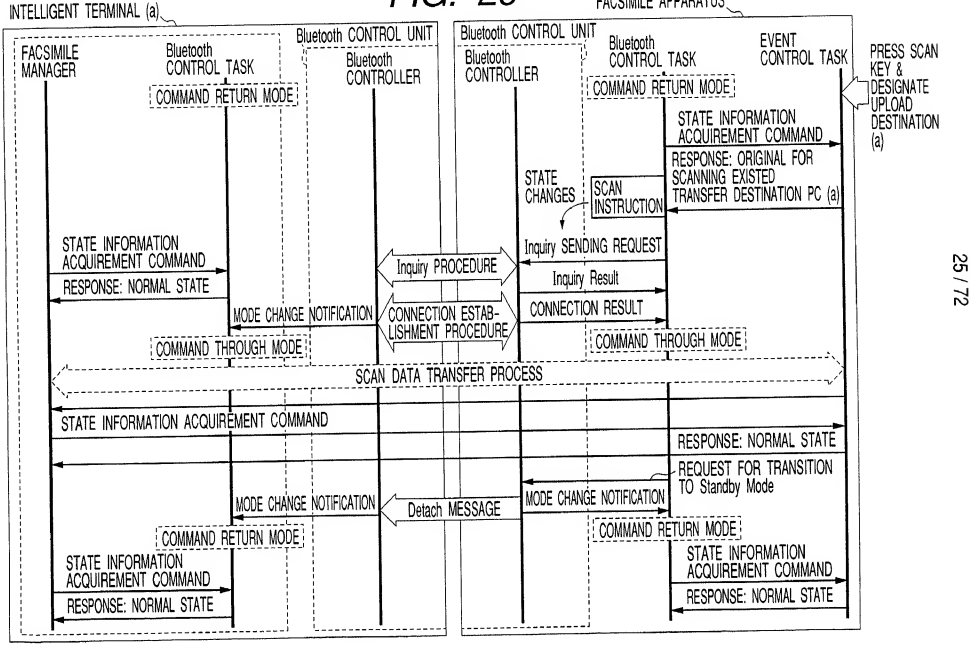

INTELLIGENT TERMINAL (a)
FACSIMILE APPARATUS
FACSIMILE MANAGER
Bluetooth CONTROL TASK
Bluetooth CONTROL UNIT
Bluetooth CONTROLLER
Bluetooth CONTROL UNIT
Bluetooth CONTROLLER
Bluetooth CONTROL TASK
EVENT CONTROL TASK
PRESS SCAN KEY & DESIGNATE UPLOAD DESTINATION (a)
COMMAND RETURN MODE
COMMAND RETURN MODE
STATE INFORMATION ACQUIREMENT COMMAND
RESPONSE: ORIGINAL FOR SCANNING EXISTED TRANSFER DESTINATION PC (a)
STATE CHANGES
SCAN INSTRUCTION
STATE INFORMATION ACQUIREMENT COMMAND
Inquiry PROCEDURE
Inquiry SENDING REQUEST
RESPONSE: NORMAL STATE
Inquiry Result
MODE CHANGE NOTIFICATION
CONNECTION ESTAB-LISHMENT PROCEDURE
CONNECTION RESULT
COMMAND THROUGH MODE
COMMAND THROUGH MODE
SCAN DATA TRANSFER PROCESS
STATE INFORMATION ACQUIREMENT COMMAND
RESPONSE: NORMAL STATE
REQUEST FOR TRANSITION TO Standby Mode
MODE CHANGE NOTIFICATION
Detach MESSAGE
MODE CHANGE NOTIFICATION
COMMAND RETURN MODE
COMMAND RETURN MODE
STATE INFORMATION ACQUIREMENT COMMAND
STATE INFORMATION ACQUIREMENT COMMAND
RESPONSE: NORMAL STATE
RESPONSE: NORMAL STATE

FIG. 27

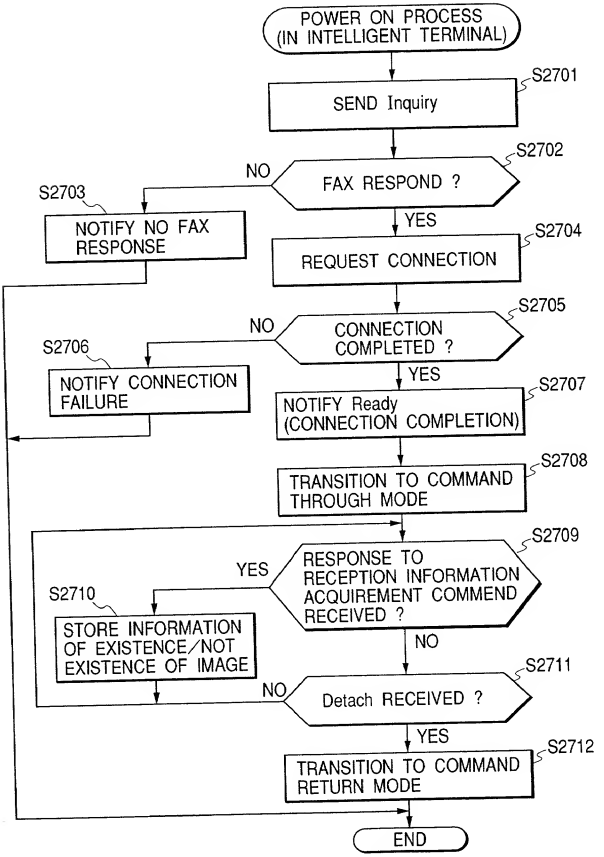

POWER ON PROCESS (IN INTELLIGENT TERMINAL)
SEND Inquiry
S2701
FAX RESPOND ?
S2702
NO
YES
S2703
NOTIFY NO FAX RESPONSE
REQUEST CONNECTION
S2704
CONNECTION COMPLETED ?
S2705
NO
YES
S2706
NOTIFY CONNECTION FAILURE
NOTIFY Ready (CONNECTION COMPLETION)
S2707
TRANSITION TO COMMAND THROUGH MODE
S2708
RESPONSE TO RECEPTION INFORMATION ACQUIREMENT COMMEND RECEIVED ?
S2709
YES
S2710
STORE INFORMATION OF EXISTENCE/NOT EXISTENCE OF IMAGE
NO
Detach RECEIVED ?
S2711
NO
YES
TRANSITION TO COMMAND RETURN MODE
S2712
END

FIG. 28

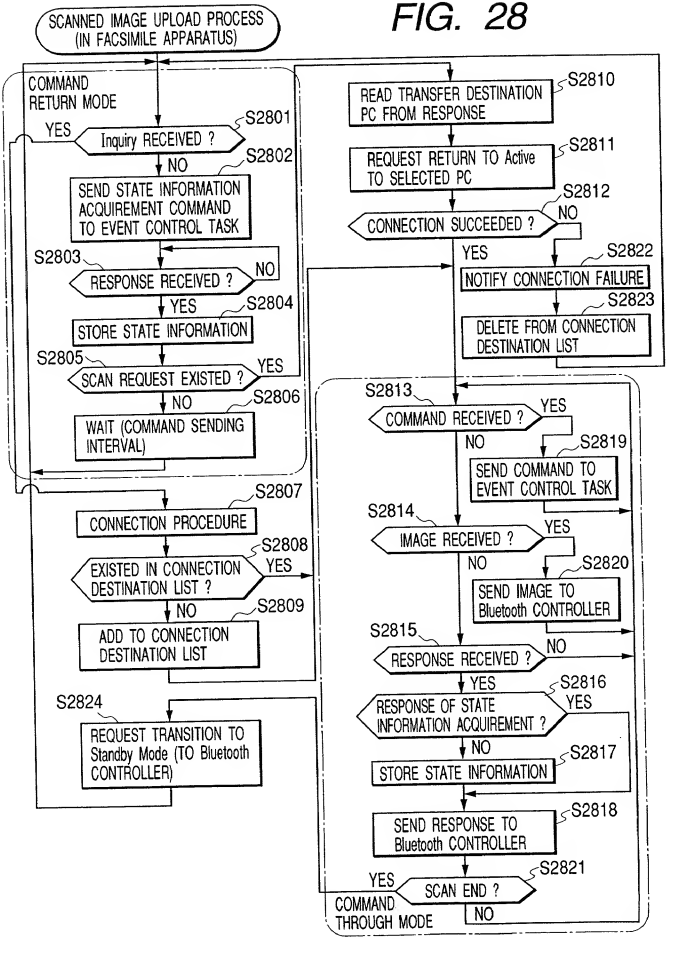

SCANNED IMAGE UPLOAD PROCESS (IN FACSIMILE APPARATUS)
COMMAND RETURN MODE
S2801
Inquiry RECEIVED ?
YES
NO
S2802
SEND STATE INFORMATION ACQUIREMENT COMMAND TO EVENT CONTROL TASK
S2803
RESPONSE RECEIVED ?
NO
YES
S2804
STORE STATE INFORMATION
S2805
SCAN REQUEST EXISTED ?
YES
NO
S2806
WAIT (COMMAND SENDING INTERVAL)
S2807
CONNECTION PROCEDURE
S2808
EXISTED IN CONNECTION DESTINATION LIST ?
YES
NO
S2809
ADD TO CONNECTION DESTINATION LIST
S2824
REQUEST TRANSITION TO Standby Mode (TO Bluetooth CONTROLLER)
S2810
READ TRANSFER DESTINATION PC FROM RESPONSE
S2811
REQUEST RETURN TO Active TO SELECTED PC
S2812
CONNECTION SUCCEEDED ?
NO
YES
S2822
NOTIFY CONNECTION FAILURE
S2823
DELETE FROM CONNECTION DESTINATION LIST
S2813
COMMAND RECEIVED ?
YES
NO
S2819
SEND COMMAND TO EVENT CONTROL TASK
S2814
IMAGE RECEIVED ?
YES
NO
S2820
SEND IMAGE TO Bluetooth CONTROLLER
S2815
RESPONSE RECEIVED ?
NO
YES
S2816
RESPONSE OF STATE INFORMATION ACQUIREMENT ?
YES
NO
S2817
STORE STATE INFORMATION
S2818
SEND RESPONSE TO Bluetooth CONTROLLER
S2821
SCAN END ?
YES
NO
COMMAND THROUGH MODE

FIG. 29

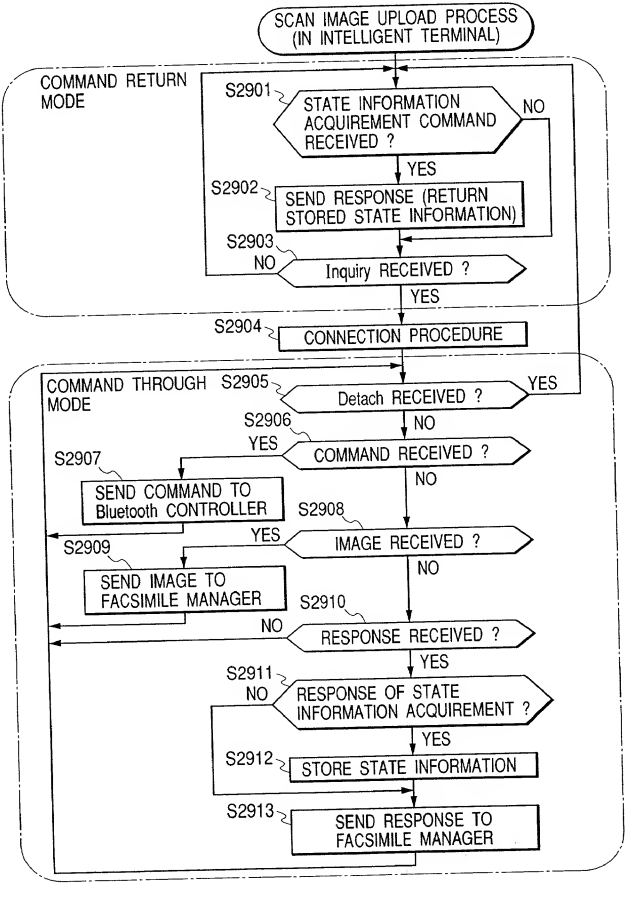

SCAN IMAGE UPLOAD PROCESS (IN INTELLIGENT TERMINAL)
COMMAND RETURN MODE
S2901
STATE INFORMATION ACQUIREMENT COMMAND RECEIVED ?
NO
YES
S2902
SEND RESPONSE (RETURN STORED STATE INFORMATION)
S2903
NO
Inquiry RECEIVED ?
YES
S2904
CONNECTION PROCEDURE
COMMAND THROUGH MODE
S2905
Detach RECEIVED ?
YES
S2906
NO
YES
COMMAND RECEIVED ?
S2907
NO
SEND COMMAND TO Bluetooth CONTROLLER
S2908
YES
IMAGE RECEIVED ?
S2909
NO
SEND IMAGE TO FACSIMILE MANAGER
S2910
NO
RESPONSE RECEIVED ?
YES
S2911
NO
RESPONSE OF STATE INFORMATION ACQUIREMENT ?
YES
S2912
STORE STATE INFORMATION
S2913
SEND RESPONSE TO FACSIMILE MANAGER

FIG. 30

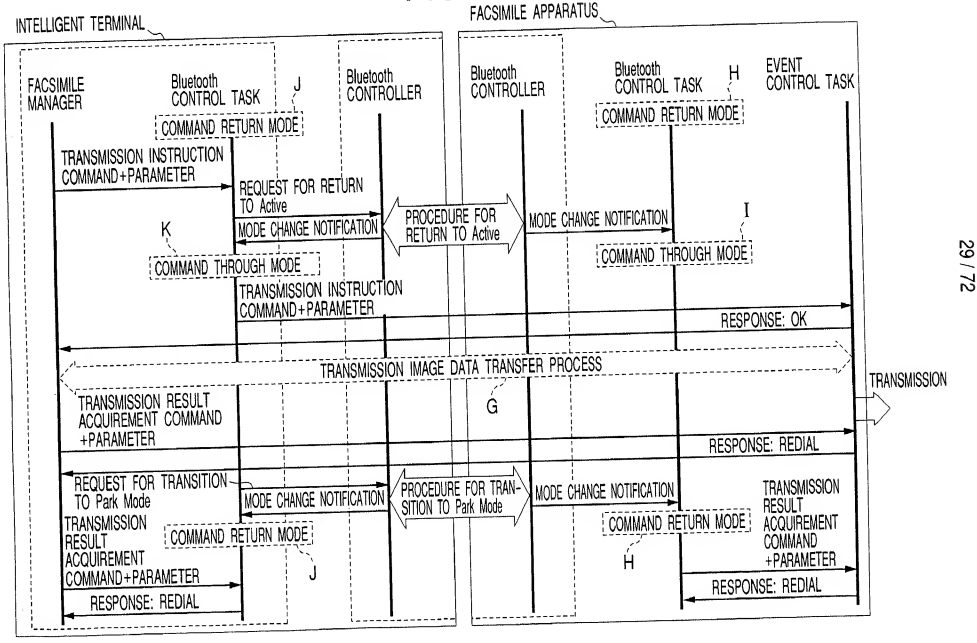

INTELLIGENT TERMINAL
FACSIMILE APPARATUS
FACSIMILE MANAGER
Bluetooth CONTROL TASK
J
Bluetooth CONTROLLER
Bluetooth CONTROLLER
Bluetooth CONTROL TASK
H
EVENT CONTROL TASK
COMMAND RETURN MODE
COMMAND RETURN MODE
TRANSMISSION INSTRUCTION COMMAND+PARAMETER
REQUEST FOR RETURN TO Active
MODE CHANGE NOTIFICATION
PROCEDURE FOR RETURN TO Active
MODE CHANGE NOTIFICATION
I
K
COMMAND THROUGH MODE
COMMAND THROUGH MODE
TRANSMISSION INSTRUCTION COMMAND+PARAMETER
RESPONSE: OK
TRANSMISSION IMAGE DATA TRANSFER PROCESS
TRANSMISSION
TRANSMISSION RESULT ACQUIREMENT COMMAND +PARAMETER
G
RESPONSE: REDIAL
REQUEST FOR TRANSITION TO Park Mode
MODE CHANGE NOTIFICATION
PROCEDURE FOR TRANSITION TO Park Mode
MODE CHANGE NOTIFICATION
TRANSMISSION RESULT ACQUIREMENT COMMAND +PARAMETER
TRANSMISSION RESULT ACQUIREMENT COMMAND+PARAMETER
COMMAND RETURN MODE
COMMAND RETURN MODE
J
H
RESPONSE: REDIAL
RESPONSE: REDIAL

FIG. 31

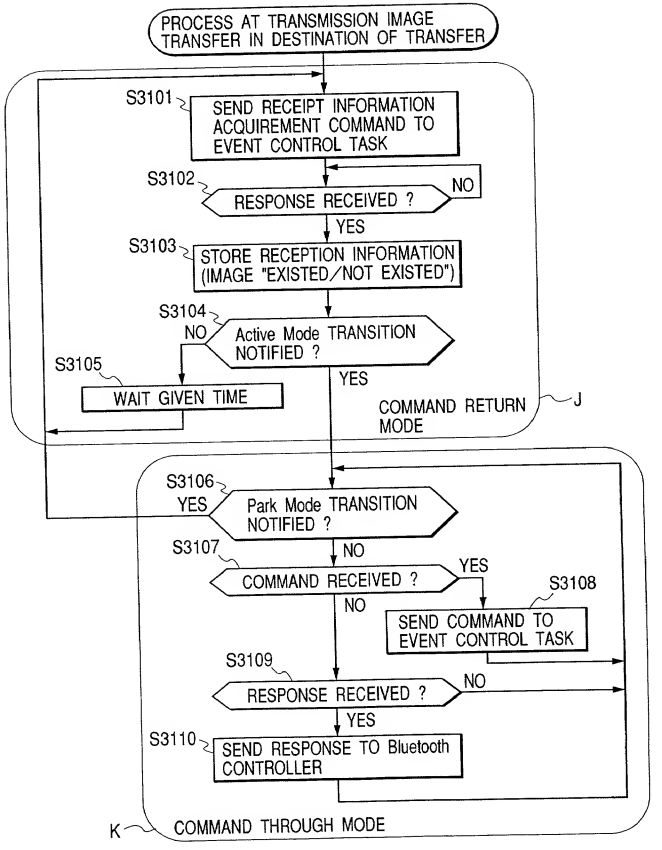

PROCESS AT TRANSMISSION IMAGE TRANSFER IN DESTINATION OF TRANSFER
S3101
SEND RECEIPT INFORMATION ACQUIREMENT COMMAND TO EVENT CONTROL TASK
S3102
RESPONSE RECEIVED ?
NO
YES
S3103
STORE RECEPTION INFORMATION (IMAGE "EXISTED/NOT EXISTED")
S3104
NO
Active Mode TRANSITION NOTIFIED ?
S3105
WAIT GIVEN TIME
YES
COMMAND RETURN MODE
J
S3106
YES
Park Mode TRANSITION NOTIFIED ?
S3107
NO
COMMAND RECEIVED ?
YES
S3108
NO
SEND COMMAND TO EVENT CONTROL TASK
S3109
RESPONSE RECEIVED ?
NO
YES
S3110
SEND RESPONSE TO Bluetooth CONTROLLER
K
COMMAND THROUGH MODE

FIG. 32

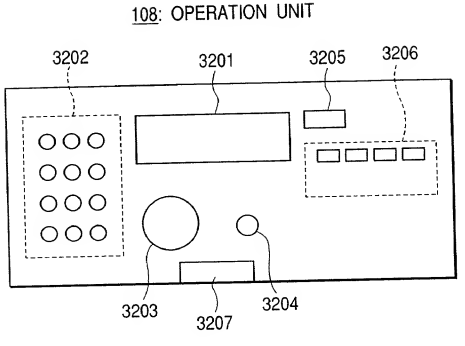

108: OPERATION UNIT
3202
3201
3205
3206
3203
3207
3204

FIG. 33

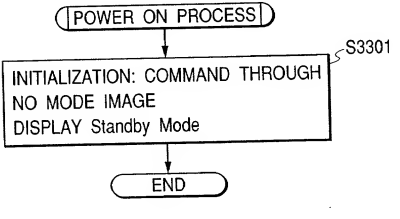

POWER ON PROCESS
S3301
INITIALIZATION: COMMAND THROUGH
NO MODE IMAGE
DISPLAY Standby Mode
END

FIG. 34

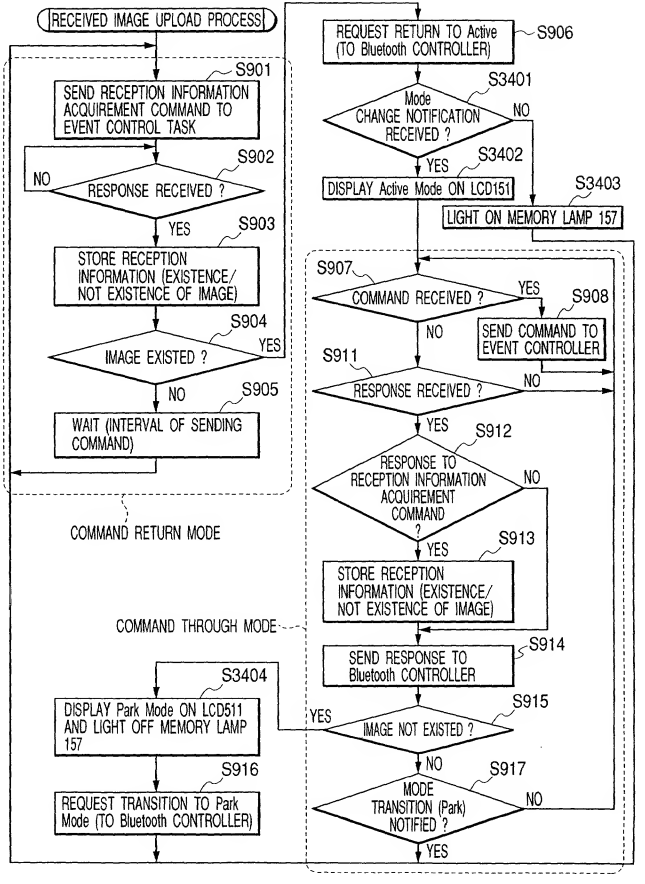

RECEIVED IMAGE UPLOAD PROCESS
S901
SEND RECEPTION INFORMATION ACQUIREMENT COMMAND TO EVENT CONTROL TASK
S902
NO
RESPONSE RECEIVED ?
YES
S903
STORE RECEPTION INFORMATION (EXISTENCE/ NOT EXISTENCE OF IMAGE)
S904
IMAGE EXISTED ?
YES
NO
S905
WAIT (INTERVAL OF SENDING COMMAND)
COMMAND RETURN MODE
REQUEST RETURN TO Active (TO Bluetooth CONTROLLER)
S906
S3401
Mode CHANGE NOTIFICATION RECEIVED ?
NO
YES
S3402
DISPLAY Active Mode ON LCD151
S3403
LIGHT ON MEMORY LAMP 157
S907
COMMAND RECEIVED ?
YES
S908
NO
SEND COMMAND TO EVENT CONTROLLER
S911
RESPONSE RECEIVED ?
NO
YES
S912
RESPONSE TO RECEPTION INFORMATION ACQUIREMENT COMMAND ?
NO
YES
S913
STORE RECEPTION INFORMATION (EXISTENCE/ NOT EXISTENCE OF IMAGE)
COMMAND THROUGH MODE
S914
SEND RESPONSE TO Bluetooth CONTROLLER
S915
YES
IMAGE NOT EXISTED ?
NO
S917
MODE TRANSITION (Park) NOTIFIED ?
NO
YES
S3404
DISPLAY Park Mode ON LCD511 AND LIGHT OFF MEMORY LAMP 157
S916
REQUEST TRANSITION TO Park Mode (TO Bluetooth CONTROLLER)

FIG. 35

INTELLIGENT TERMINAL
FACSIMILE APPARATUS
POWER ON
FACSIMILE MANAGER
Bluetooth CONTROL TASK
Bluetooth CONTROL UNIT
Bluetooth CONTROLLER
Master
Bluetooth CONTROLLER
Slave
Bluetooth CONTROL UNIT
Bluetooth CONTROL TASK
EVENT CONTROL TASK
Inquiry SENDING REQUEST
Inquiry PROCEDURE
Inquiry Result
CONNECTION REQUEST
CONNECTION ESTAB-LISHMENT PROCEDURE
CONNECTION RESULT
CONNECTION RESULT
Ready
COMMAND THROUGH MODE
COMMAND THROUGH MODE
INITIALIZATION PROCESS
STATE INFORMATION ACQUIREMENT COMMAND
RESPONSE (RECEIVED IMAGE: NONE, TRANSMISSION: POSSIBLE, RECEPTION: POSSIBLE, SCAN: POSSIBLE)
NO RECEIVED IMAGE
TRANSMISSION POSSIBLE
RECEPTION POSSIBLE
SCAN POSSIBLE
(STORE)
NO RECEIVED IMAGE
TRANSMISSION POSSIBLE
RECEPTION POSSIBLE
SCAN POSSIBLE
(STORE)
REQUEST FOR TRANSITION TO Park Mode
MODE CHANGE NOTIFICATION
PROCEDURE FOR TRAN-SITION TO Park Mode
MODE CHANGE NOTIFICATION
COMMAND RETURN MODE
COMMAND RETURN MODE
STATE INFORMATION ACQUIREMENT COMMAND
RESPONSE (IMAGE NOT EXISTED···)
STATE INFORMATION ACQUIREMENT COMMAND
RESPONSE (IMAGE NOT EXISTED···)
STATE INFORMATION ACQUIREMENT COMMAND
RESPONSE (IMAGE NOT EXISTED···)

FIG. 36

INTELLIGENT TERMINAL
FACSIMILE APPARATUS
FACSIMILE MANAGER
Bluetooth CONTROL TASK
COMMAND RETURN MODE
IMAGE NOT EXISTED
Bluetooth CONTROL UNIT
Bluetooth CONTROLLER
Bluetooth CONTROL UNIT
Bluetooth CONTROLLER
Bluetooth CONTROL TASK
COMMAND RETURN MODE
IMAGE NOT EXISTED
EVENT CONTROL TASK
RECEIVE IMAGE
STATE INFORMATION ACQUIREMENT COMMAND
RESPONSE (IMAGE NOT EXISTED···)
MODE CHANGE NOTIFICATION
STATE INFORMATION ACQUIREMENT COMMAND
PROCEDURE FOR RETURN TO Active
STATE INFORMATION ACQUIREMENT COMMAND
STATE INFORMATION ACQUIREMENT COMMAND
RESPONSE (IMAGE NOT EXISTED···)
REQUEST FOR TRANSITION TO Park Mode
RESPONSE (RECEIVED IMAGE: EXISTED, TRANSMISSION: POSSIBLE, RECEPTION: POSSIBLE, SCAN: POSSIBLE)
STATE INFORMATION ACQUIREMENT COMMAND
RESPONSE (IMAGE NOT EXISTED···)
MODE CHANGE NOTIFICATION
PROCEDURE FOR TRANSITION TO Park Mode
STATE INFORMATION ACQUIREMENT COMMAND
RESPONSE (IMAGE EXISTED···)
IMAGE EXISTED
STATE CHANGES
REQUEST FOR RETURN TO Active
MODE CHANGE NOTIFICATION
COMMAND THROUGH MODE
MODE CHANGE NOTIFICATION
COMMAND RETURN MODE
STATE INFORMATION ACQUIREMENT COMMAND
RESPONSE (IMAGE EXISTED···)
STATE INFORMATION ACQUIREMENT COMMAND
RESPONSE (IMAGE NOT EXISTED···)

FIG. 37

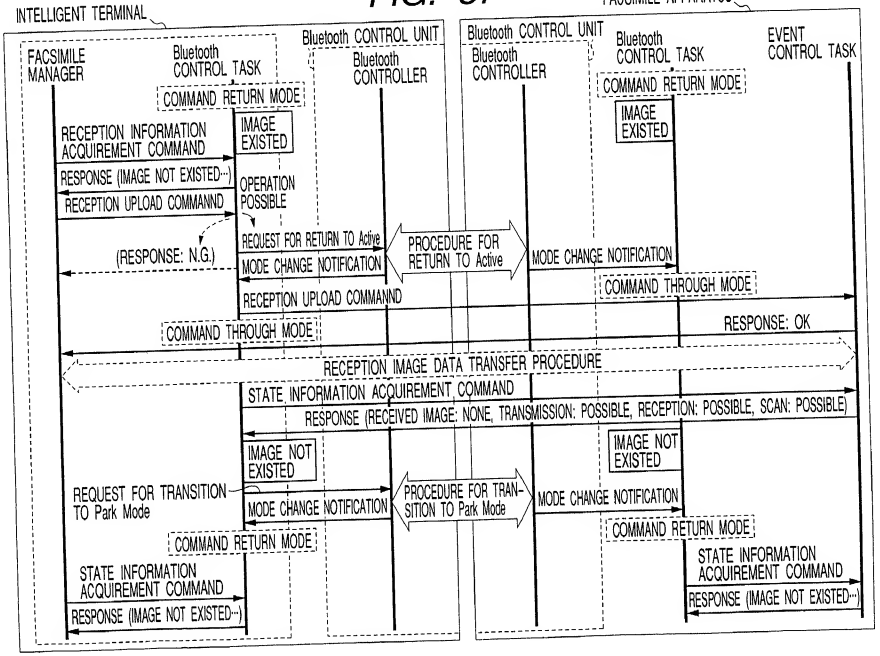

INTELLIGENT TERMINAL
FACSIMILE APPARATUS
FACSIMILE MANAGER
Bluetooth CONTROL TASK
Bluetooth CONTROL UNIT
Bluetooth CONTROLLER
Bluetooth CONTROL UNIT
Bluetooth CONTROLLER
Bluetooth CONTROL TASK
EVENT CONTROL TASK
COMMAND RETURN MODE
IMAGE EXISTED
RECEPTION INFORMATION ACQUIREMENT COMMAND
RESPONSE (IMAGE NOT EXISTED···)
OPERATION POSSIBLE
RECEPTION UPLOAD COMMANND
(RESPONSE: N.G.)
REQUEST FOR RETURN TO Active
MODE CHANGE NOTIFICATION
PROCEDURE FOR RETURN TO Active
MODE CHANGE NOTIFICATION
COMMAND THROUGH MODE
RECEPTION UPLOAD COMMANND
COMMAND THROUGH MODE
RESPONSE: OK
RECEPTION IMAGE DATA TRANSFER PROCEDURE
STATE INFORMATION ACQUIREMENT COMMAND
RESPONSE (RECEIVED IMAGE: NONE, TRANSMISSION: POSSIBLE, RECEPTION: POSSIBLE, SCAN: POSSIBLE)
IMAGE NOT EXISTED
IMAGE NOT EXISTED
REQUEST FOR TRANSITION TO Park Mode
MODE CHANGE NOTIFICATION
PROCEDURE FOR TRANSITION TO Park Mode
MODE CHANGE NOTIFICATION
COMMAND RETURN MODE
COMMAND RETURN MODE
STATE INFORMATION ACQUIREMENT COMMAND
RESPONSE (IMAGE NOT EXISTED···)
STATE INFORMATION ACQUIREMENT COMMAND
RESPONSE (IMAGE NOT EXISTED···)

FIG. 38

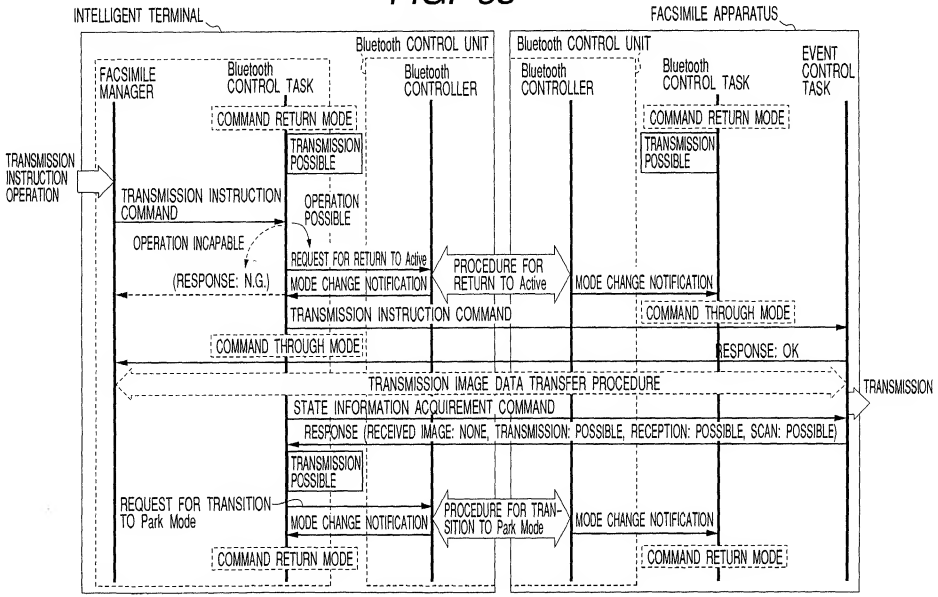

INTELLIGENT TERMINAL
FACSIMILE APPARATUS
Bluetooth CONTROL UNIT
Bluetooth CONTROL UNIT
FACSIMILE MANAGER
Bluetooth CONTROL TASK
Bluetooth CONTROLLER
Bluetooth CONTROLLER
Bluetooth CONTROL TASK
EVENT CONTROL TASK
COMMAND RETURN MODE
COMMAND RETURN MODE
TRANSMISSION POSSIBLE
TRANSMISSION POSSIBLE
TRANSMISSION INSTRUCTION OPERATION
TRANSMISSION INSTRUCTION COMMAND
OPERATION POSSIBLE
OPERATION INCAPABLE
REQUEST FOR RETURN TO Active
(RESPONSE: N.G.)
MODE CHANGE NOTIFICATION
PROCEDURE FOR RETURN TO Active
MODE CHANGE NOTIFICATION
TRANSMISSION INSTRUCTION COMMAND
COMMAND THROUGH MODE
COMMAND THROUGH MODE
RESPONSE: OK
TRANSMISSION IMAGE DATA TRANSFER PROCEDURE
TRANSMISSION
STATE INFORMATION ACQUIREMENT COMMAND
RESPONSE (RECEIVED IMAGE: NONE, TRANSMISSION: POSSIBLE, RECEPTION: POSSIBLE, SCAN: POSSIBLE)
TRANSMISSION POSSIBLE
REQUEST FOR TRANSITION TO Park Mode
MODE CHANGE NOTIFICATION
PROCEDURE FOR TRANSITION TO Park Mode
MODE CHANGE NOTIFICATION
COMMAND RETURN MODE
COMMAND RETURN MODE

FIG. 39

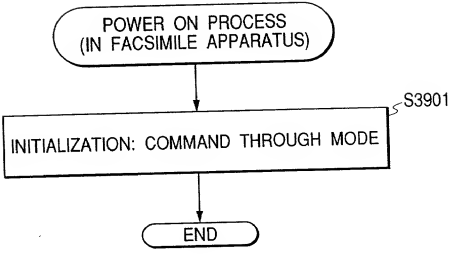

POWER ON PROCESS
(IN FACSIMILE APPARATUS)
S3901
INITIALIZATION: COMMAND THROUGH MODE
END

FIG. 40

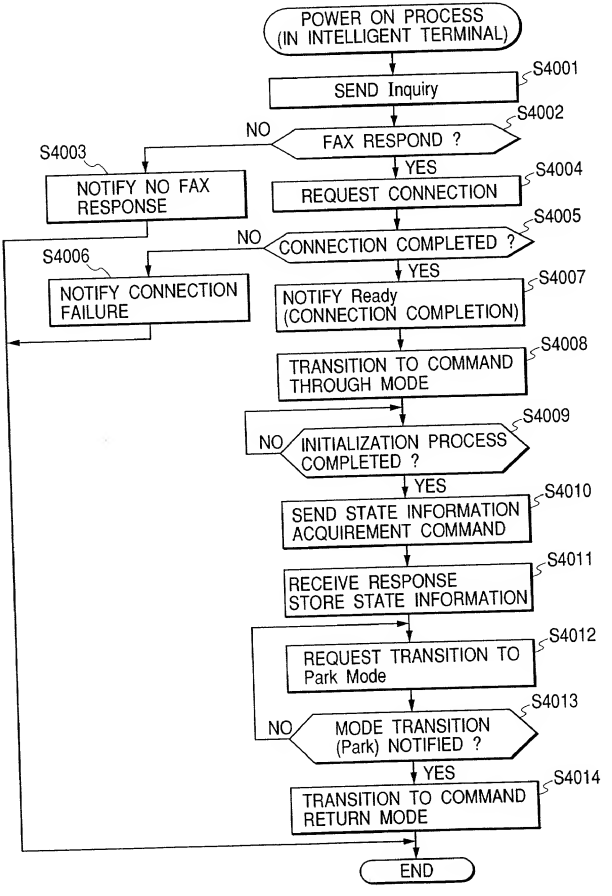

POWER ON PROCESS (IN INTELLIGENT TERMINAL)
SEND Inquiry
S4001
FAX RESPOND ?
S4002
NO
YES
S4003
NOTIFY NO FAX RESPONSE
REQUEST CONNECTION
S4004
CONNECTION COMPLETED ?
S4005
NO
YES
S4006
NOTIFY CONNECTION FAILURE
NOTIFY Ready (CONNECTION COMPLETION)
S4007
TRANSITION TO COMMAND THROUGH MODE
S4008
INITIALIZATION PROCESS COMPLETED ?
S4009
NO
YES
SEND STATE INFORMATION ACQUIREMENT COMMAND
S4010
RECEIVE RESPONSE STORE STATE INFORMATION
S4011
REQUEST TRANSITION TO Park Mode
S4012
MODE TRANSITION (Park) NOTIFIED ?
S4013
NO
YES
TRANSITION TO COMMAND RETURN MODE
S4014
END

FIG. 41

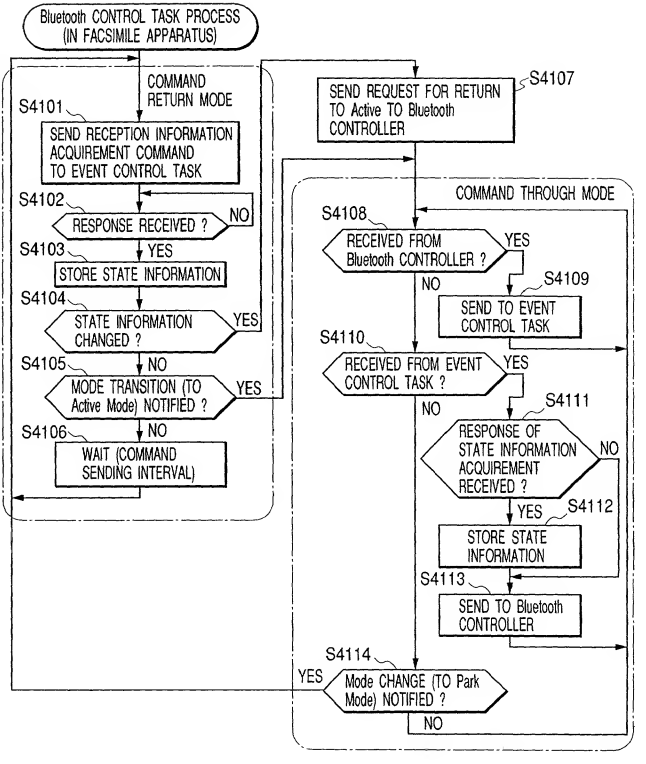

Bluetooth CONTROL TASK PROCESS (IN FACSIMILE APPARATUS)
COMMAND RETURN MODE
S4101
SEND RECEPTION INFORMATION ACQUIREMENT COMMAND TO EVENT CONTROL TASK
S4102
RESPONSE RECEIVED ?
NO
YES
S4103
STORE STATE INFORMATION
S4104
STATE INFORMATION CHANGED ?
YES
NO
S4105
MODE TRANSITION (TO Active Mode) NOTIFIED ?
YES
NO
S4106
WAIT (COMMAND SENDING INTERVAL)
SEND REQUEST FOR RETURN TO Active TO Bluetooth CONTROLLER
S4107
COMMAND THROUGH MODE
S4108
RECEIVED FROM Bluetooth CONTROLLER ?
YES
NO
S4109
SEND TO EVENT CONTROL TASK
S4110
RECEIVED FROM EVENT CONTROL TASK ?
YES
NO
S4111
RESPONSE OF STATE INFORMATION ACQUIREMENT RECEIVED ?
NO
YES
S4112
STORE STATE INFORMATION
S4113
SEND TO Bluetooth CONTROLLER
S4114
YES
Mode CHANGE (TO Park Mode) NOTIFIED ?
NO

FIG. 42

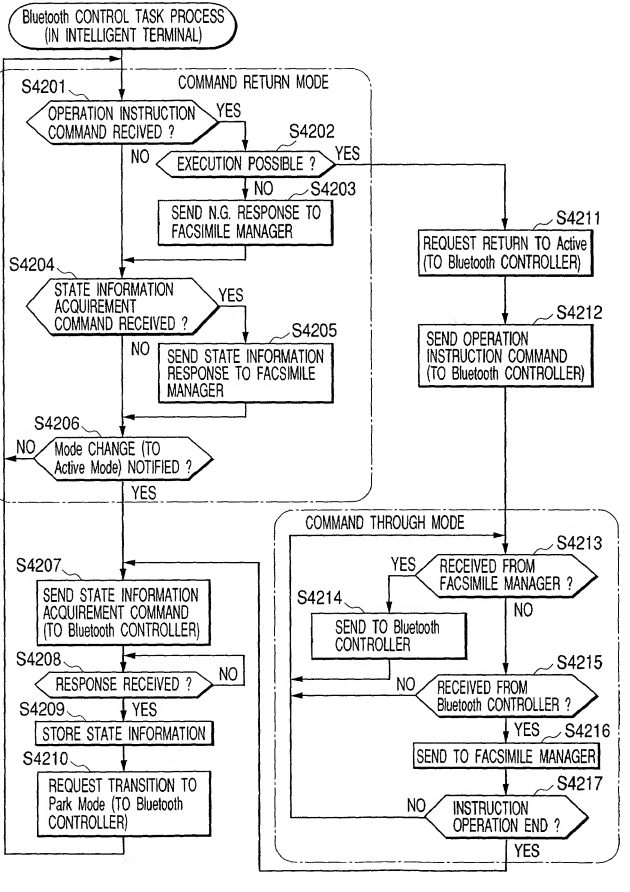

Bluetooth CONTROL TASK PROCESS (IN INTELLIGENT TERMINAL)
COMMAND RETURN MODE
S4201
OPERATION INSTRUCTION COMMAND RECIVED ?
YES
S4202
EXECUTION POSSIBLE ?
YES
NO
S4203
SEND N.G. RESPONSE TO FACSIMILE MANAGER
S4204
STATE INFORMATION ACQUIREMENT COMMAND RECEIVED ?
YES
NO
S4205
SEND STATE INFORMATION RESPONSE TO FACSIMILE MANAGER
S4206
NO
Mode CHANGE (TO Active Mode) NOTIFIED ?
YES
S4207
SEND STATE INFORMATION ACQUIREMENT COMMAND (TO Bluetooth CONTROLLER)
S4208
RESPONSE RECEIVED ?
NO
S4209
YES
STORE STATE INFORMATION
S4210
REQUEST TRANSITION TO Park Mode (TO Bluetooth CONTROLLER)
S4211
REQUEST RETURN TO Active (TO Bluetooth CONTROLLER)
S4212
SEND OPERATION INSTRUCTION COMMAND (TO Bluetooth CONTROLLER)
COMMAND THROUGH MODE
S4213
YES
RECEIVED FROM FACSIMILE MANAGER ?
NO
S4214
SEND TO Bluetooth CONTROLLER
S4215
NO
RECEIVED FROM Bluetooth CONTROLLER ?
YES
S4216
SEND TO FACSIMILE MANAGER
S4217
NO
INSTRUCTION OPERATION END ?
YES

FIG. 43

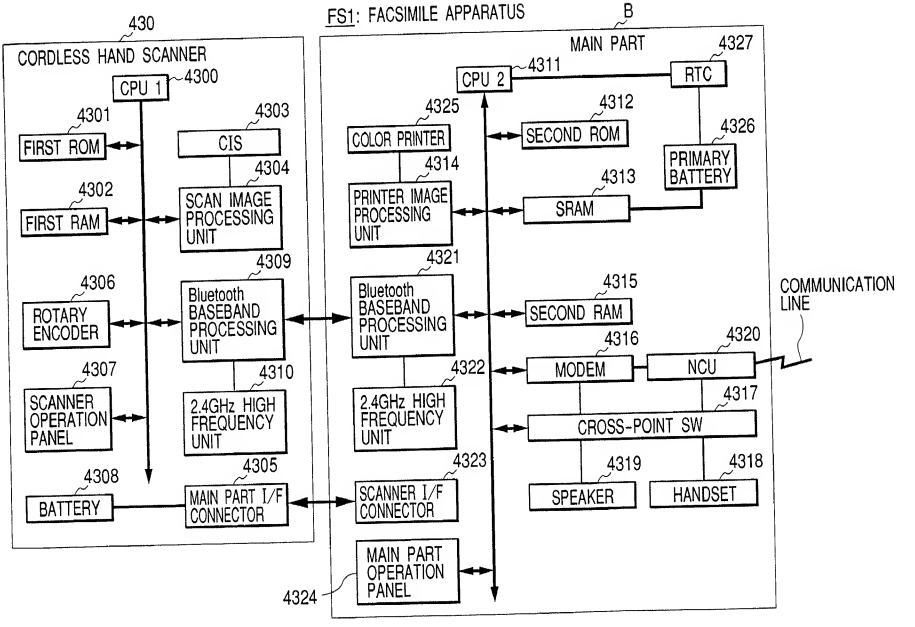

FS1: FACSIMILE APPARATUS
B
MAIN PART
CORDLESS HAND SCANNER
430
CPU 1
4300
CPU 2
4311
RTC
4327
FIRST ROM
4301
CIS
4303
COLOR PRINTER
4325
SECOND ROM
4312
PRIMARY BATTERY
4326
FIRST RAM
4302
SCAN IMAGE PROCESSING UNIT
4304
PRINTER IMAGE PROCESSING UNIT
4314
SRAM
4313
ROTARY ENCODER
4306
Bluetooth BASEBAND PROCESSING UNIT
4309
Bluetooth BASEBAND PROCESSING UNIT
4321
SECOND RAM
4315
COMMUNICATION LINE
SCANNER OPERATION PANEL
4307
2.4GHz HIGH FREQUENCY UNIT
4310
2.4GHz HIGH FREQUENCY UNIT
4322
MODEM
4316
NCU
4320
CROSS-POINT SW
4317
BATTERY
4308
MAIN PART I/F CONNECTOR
4305
SCANNER I/F CONNECTOR
4323
SPEAKER
4319
HANDSET
4318
MAIN PART OPERATION PANEL
4324

FIG. 44

FS1: FACSIMILE APPARATUS

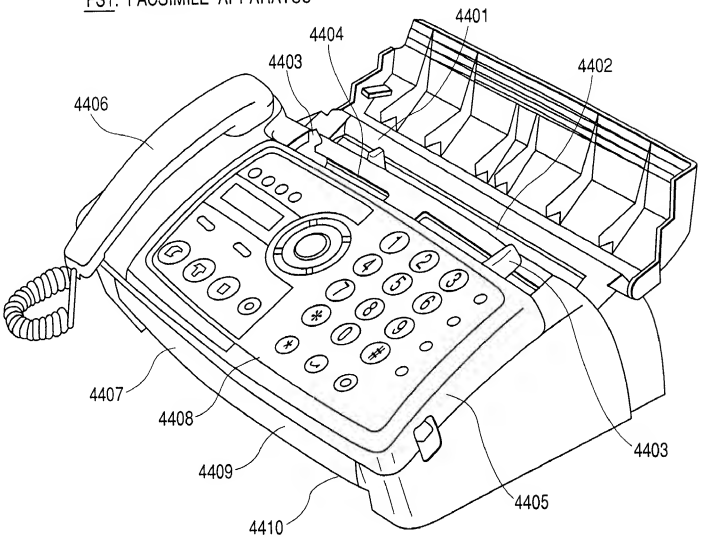


FIG. 45

4408: OPERATION PANEL IN MAIN PART

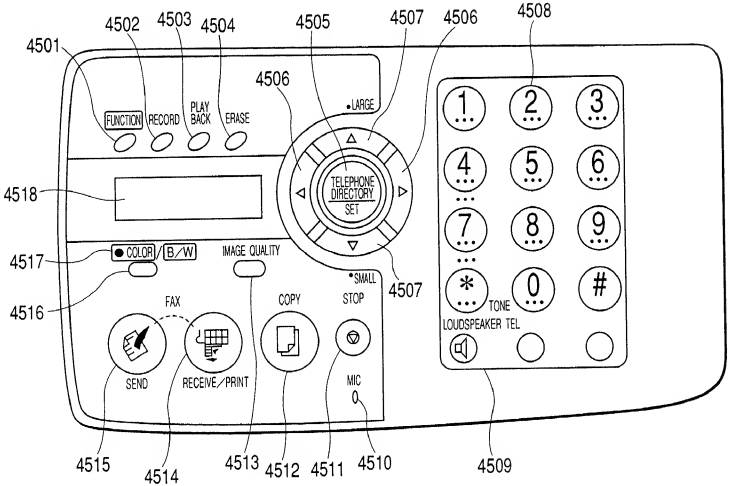


FIG. 46

430: CORDLESS HAND SCANNER

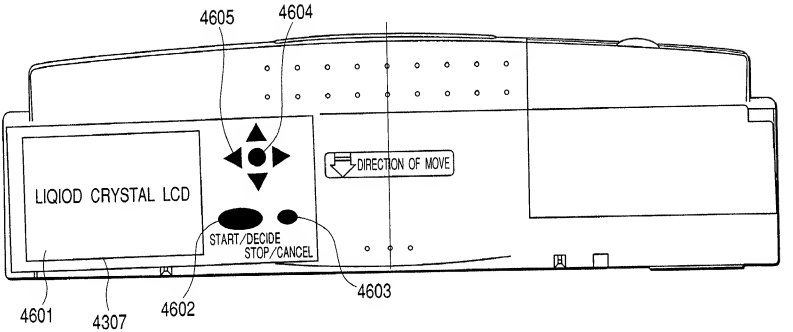


FIG. 47

470: CORDLESS HAND SCANNER

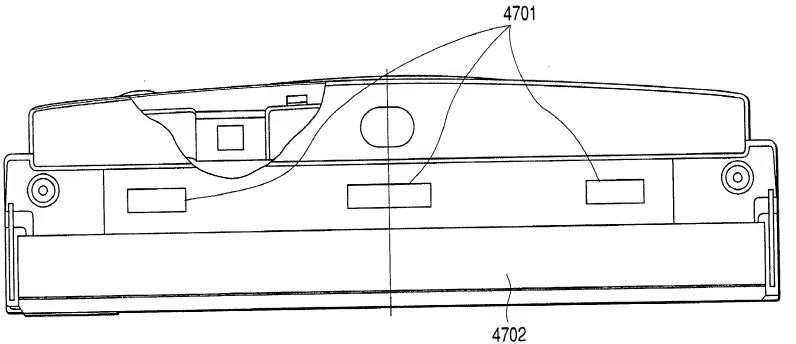


FIG. 48

INITIALIZATION OPERATION OF HAND SCANNER 430

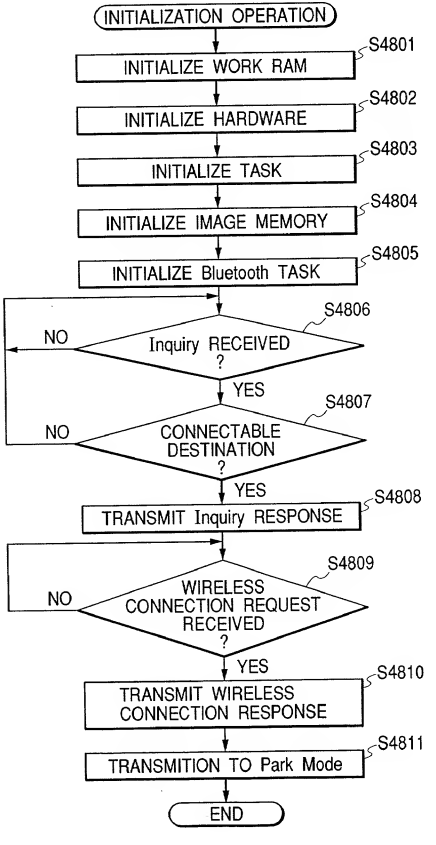


FIG. 49

OPERATION FOR TRANSITION OF HAND SCANNER 430 TO Park Mode OF HAND SCANNER 430

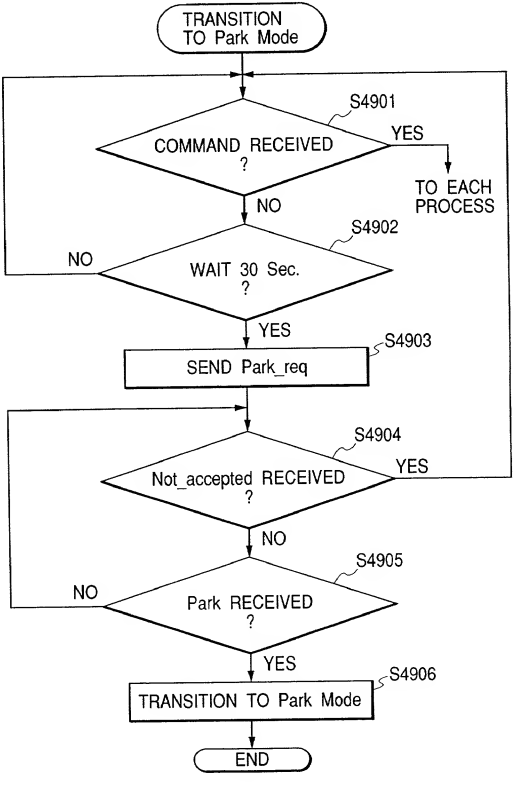


FIG. 50

INITIALIZATION OPERATION OF MAIN PART B

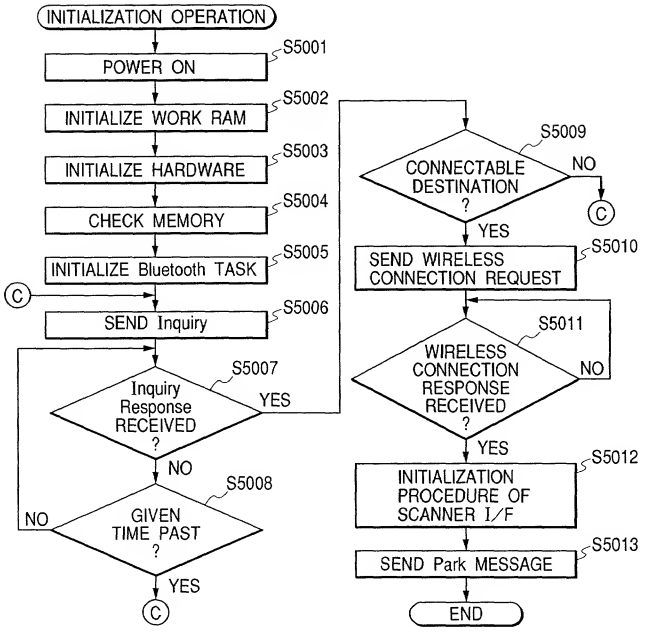


FIG. 51

PACKET

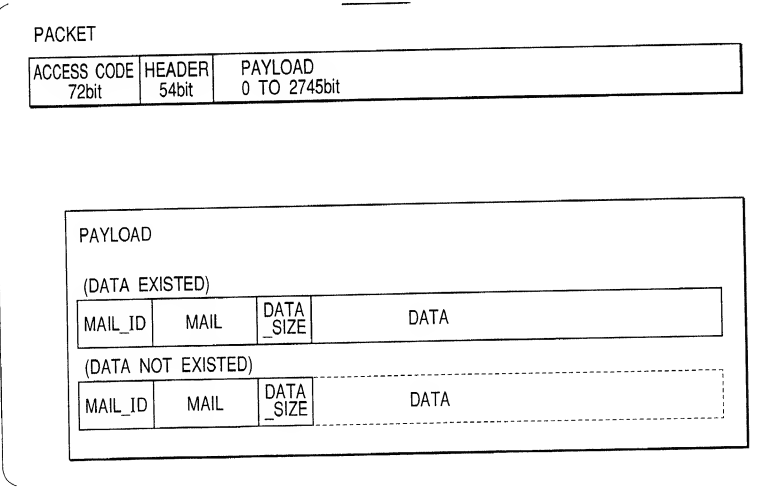


FIG. 52

EXAMPLE OF PACKET (1)

PACKET

ACCESS CODE 72bit	HEADER 54bit	PAYLOAD 0 TO 2745bit

PAYLOAD

MAIL_ID	MAIL	DATA _SIZE	DATA
• Version • Pix_clear (MAIL_ID) • Total_size	• Command • Mail_size • No1 • No2 • No3	NULL	

- Version is a management version of an interface command/response
- Pix_clear is MAIL_ID for an image deletion
- Total_size is a total size of payload portion
- Command indicates a request command
- Mail_size is an information size included in MAIL
- No.1, No.2 and No.3 are management number of image to be cancelled which is specified by the operation in main part
- NULL is zero. In this example, DATA portion is zero since the image data etc. is not included.

FIG. 53

EXAMPLE OF PACKET (2)

PACKET

ACCESS CODE 72bit	HEADER 54bit	PAYLOAD 0 TO 2745bit

PAYLOAD

MAIL_ID	MAIL	DATA _SIZE	DATA
• Version • Line_up (MAIL_ID) • Total_size	• Responce • Re_command • Mail_size • Image Number • Image size • Resolution • Color • Compression method	1_line _size	1_line_DATE

- Version is a management version of an interface command/response
- Line_up is a MAIL_ID for an image data upload
- Total_size is a total size of payload portion
- Response indicates a response which lightens on the basis of the request command
- Re_command is an instruction to the main part in a case where there are some operation instructions or error on the hand scanner (for example, STOP, CANCEL, REPLAY, PAUSE, NULL, etc.)
- Mail_size is an information size included in MAIL
- Image number/image size/resolution/color/compression method indicate information of the image to be transferred
- 1_Line_size is a data size of 1 line of the read image
- 1_Line_data is a data of 1 line of the read image

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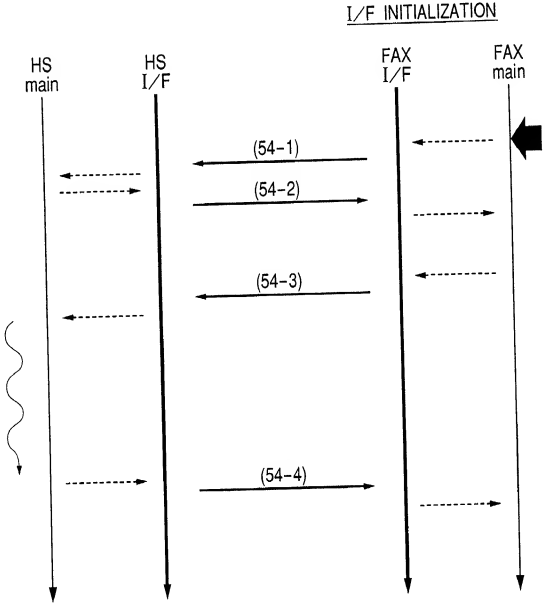
FIG. 54

I/F INITIALIZATION



MOUNTING TRIGGER

PRE-SCAN

HS main HAND SCANNER UNIT MAIN TASK

HS I/F HAND SCANNER UNIT INTERFACE TASK

FAX main MAIN PART MAIN TASK

FAX I/F MAIN PART INTERFACE TASK

(54-1) CONNECTION REQUEST
(54-2) CONNECTION CONFIRMATION
(54-3) PRE-SCAN REQUEST
(54-4) PRE-SCAN CONFIRMATION

FIG. 55

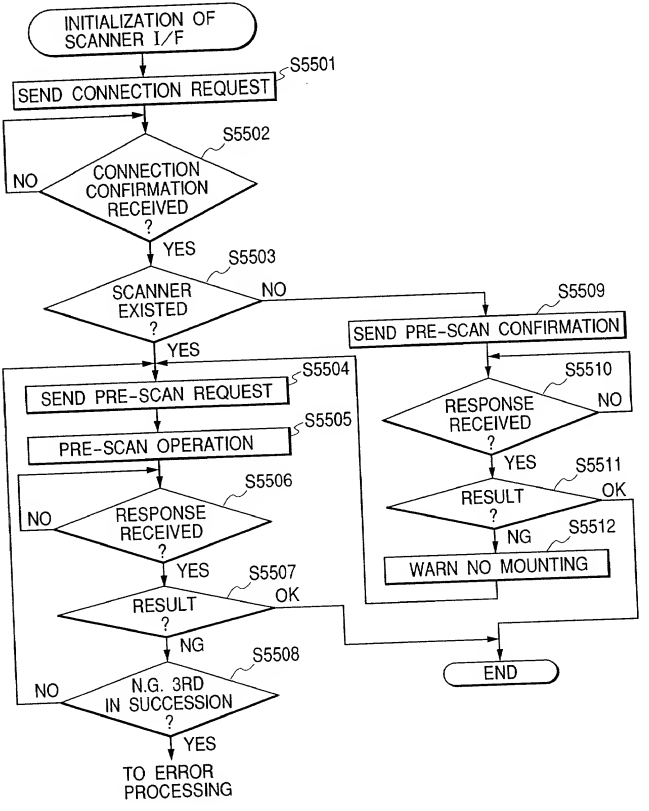

INITIALIZATION OF SCANNER I/F
SEND CONNECTION REQUEST
S5501
S5502
CONNECTION CONFIRMATION RECEIVED ?
NO
YES
S5503
SCANNER EXISTED ?
NO
YES
S5509
SEND PRE-SCAN CONFIRMATION
S5504
SEND PRE-SCAN REQUEST
S5505
PRE-SCAN OPERATION
S5506
RESPONSE RECEIVED ?
NO
YES
S5507
RESULT ?
OK
NG
S5508
N.G. 3RD IN SUCCESSION ?
NO
YES
TO ERROR PROCESSING
S5510
RESPONSE RECEIVED ?
NO
YES
S5511
RESULT ?
OK
NG
S5512
WARN NO MOUNTING
END

FIG. 56

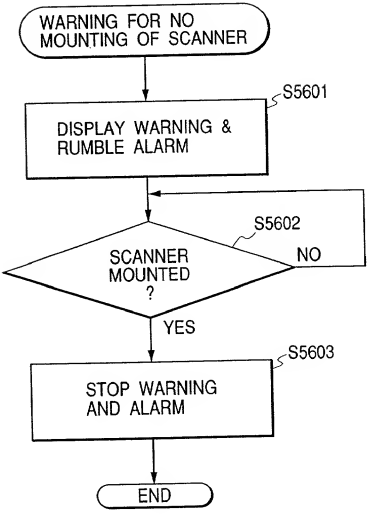

WARNING FOR NO MOUNTING OF SCANNER
S5601
DISPLAY WARNING & RUMBLE ALARM
S5602
SCANNER MOUNTED ?
NO
YES
S5603
STOP WARNING AND ALARM
END

FIG. 57

I/F IN READ OF SHEET

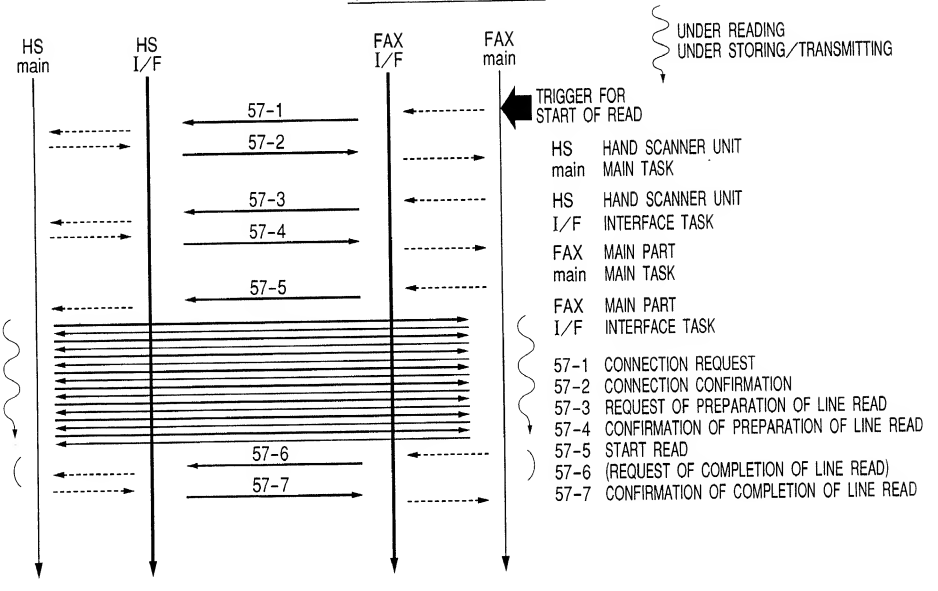


FIG. 58

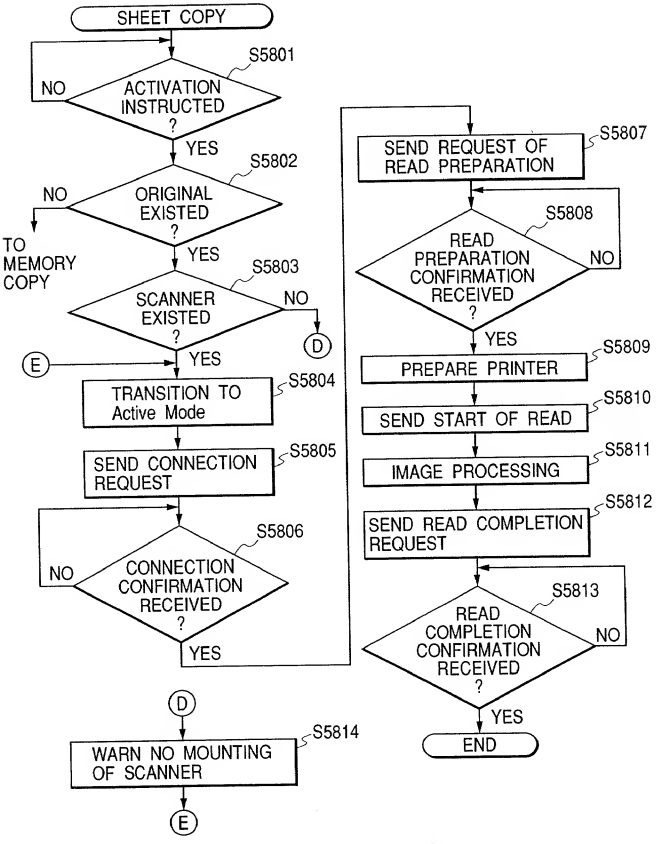

SHEET COPY
S5801
ACTIVATION INSTRUCTED ?
NO
YES
S5802
ORIGINAL EXISTED ?
NO
TO MEMORY COPY
YES
S5803
SCANNER EXISTED ?
NO
D
E
YES
TRANSITION TO Active Mode
S5804
SEND CONNECTION REQUEST
S5805
S5806
CONNECTION CONFIRMATION RECEIVED ?
NO
YES
D
WARN NO MOUNTING OF SCANNER
S5814
E
SEND REQUEST OF READ PREPARATION
S5807
S5808
READ PREPARATION CONFIRMATION RECEIVED ?
NO
YES
PREPARE PRINTER
S5809
SEND START OF READ
S5810
IMAGE PROCESSING
S5811
SEND READ COMPLETION REQUEST
S5812
S5813
READ COMPLETION CONFIRMATION RECEIVED ?
NO
YES
END

FIG. 59

OPERATION FOR TRANSITION OF HAND SCANNER 430 TO Active Mode

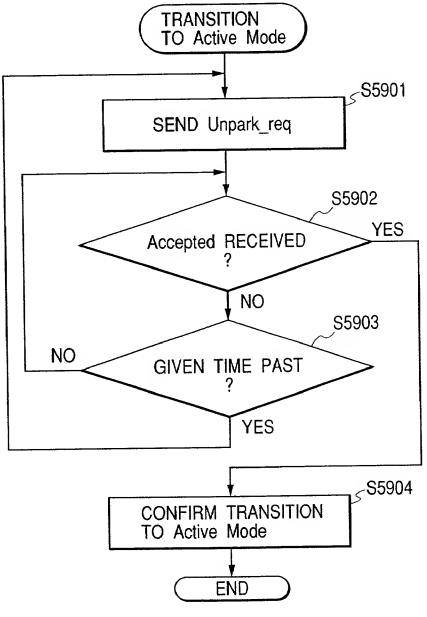
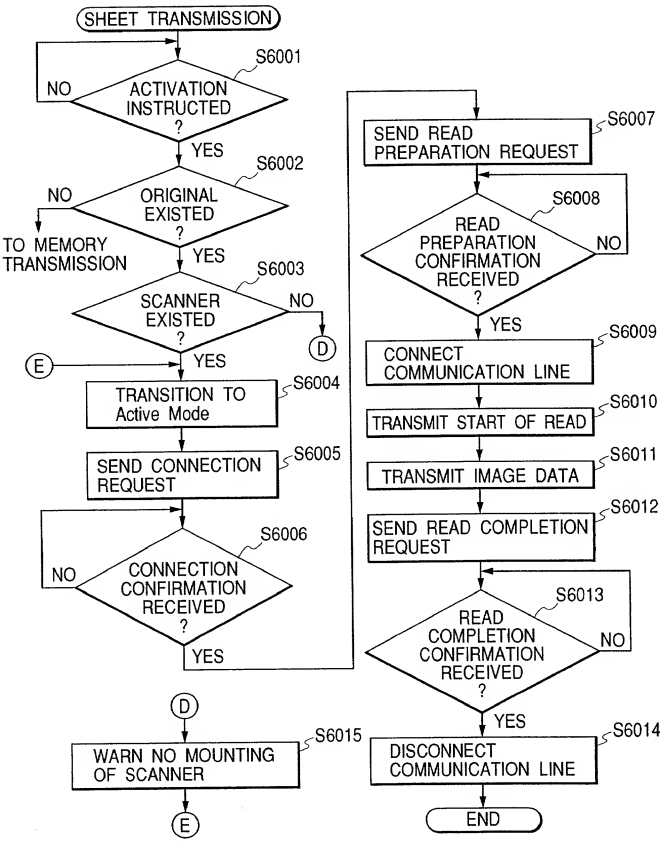


FIG. 60


SHEET TRANSMISSION
S6001
ACTIVATION INSTRUCTED ?
NO
YES
S6002
ORIGINAL EXISTED ?
NO
TO MEMORY TRANSMISSION
YES
S6003
SCANNER EXISTED ?
NO
YES
D
E
TRANSITION TO Active Mode
S6004
SEND CONNECTION REQUEST
S6005
S6006
CONNECTION CONFIRMATION RECEIVED ?
NO
YES
SEND READ PREPARATION REQUEST
S6007
S6008
READ PREPARATION CONFIRMATION RECEIVED ?
NO
YES
CONNECT COMMUNICATION LINE
S6009
TRANSMIT START OF READ
S6010
TRANSMIT IMAGE DATA
S6011
SEND READ COMPLETION REQUEST
S6012
S6013
READ COMPLETION CONFIRMATION RECEIVED ?
NO
YES
DISCONNECT COMMUNICATION LINE
S6014
END
D
WARN NO MOUNTING OF SCANNER
S6015
E

EUROPEAN PATENT

FIG. 61

I/F IN HAND SCANNER READING BY MAIN PART OPERATION

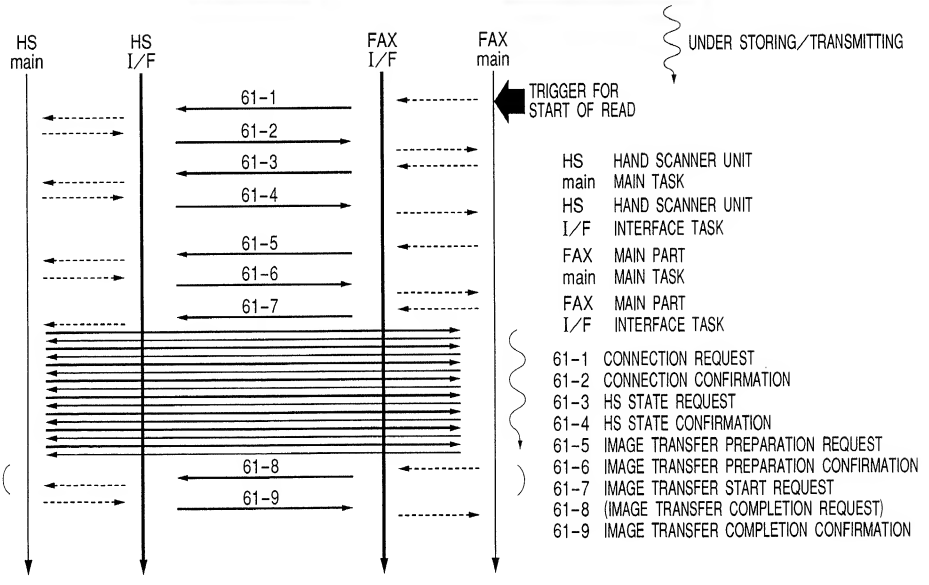


FIG. 62

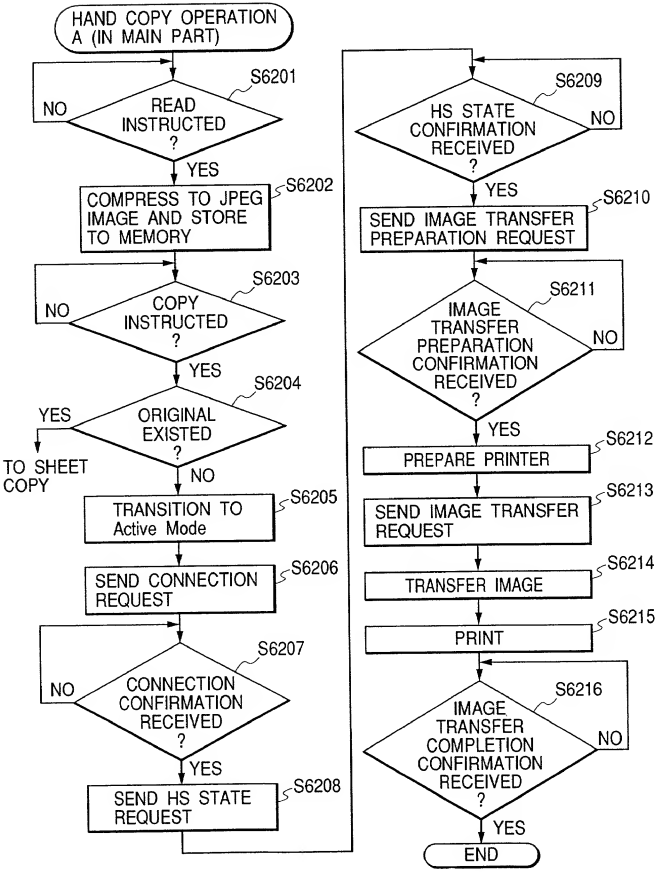
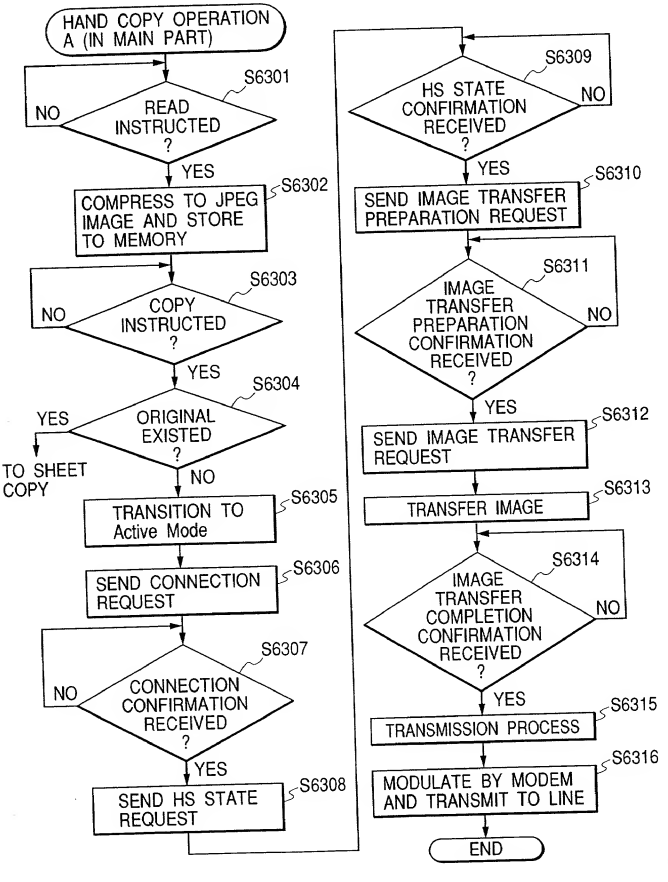

HAND COPY OPERATION A (IN MAIN PART)
S6201
READ INSTRUCTED ?
NO
YES
S6202
COMPRESS TO JPEG IMAGE AND STORE TO MEMORY
S6203
COPY INSTRUCTED ?
NO
YES
S6204
ORIGINAL EXISTED ?
YES
TO SHEET COPY
NO
S6205
TRANSITION TO Active Mode
S6206
SEND CONNECTION REQUEST
S6207
CONNECTION CONFIRMATION RECEIVED ?
NO
YES
S6208
SEND HS STATE REQUEST
S6209
HS STATE CONFIRMATION RECEIVED ?
NO
YES
S6210
SEND IMAGE TRANSFER PREPARATION REQUEST
S6211
IMAGE TRANSFER PREPARATION CONFIRMATION RECEIVED ?
NO
YES
S6212
PREPARE PRINTER
S6213
SEND IMAGE TRANSFER REQUEST
S6214
TRANSFER IMAGE
S6215
PRINT
S6216
IMAGE TRANSFER COMPLETION CONFIRMATION RECEIVED ?
NO
YES
END

FIG. 63


HAND COPY OPERATION A (IN MAIN PART)
S6301
READ INSTRUCTED ?
NO
YES
S6302
COMPRESS TO JPEG IMAGE AND STORE TO MEMORY
S6303
COPY INSTRUCTED ?
NO
YES
S6304
ORIGINAL EXISTED ?
YES
TO SHEET COPY
NO
S6305
TRANSITION TO Active Mode
S6306
SEND CONNECTION REQUEST
S6307
CONNECTION CONFIRMATION RECEIVED ?
NO
YES
S6308
SEND HS STATE REQUEST
S6309
HS STATE CONFIRMATION RECEIVED ?
NO
YES
S6310
SEND IMAGE TRANSFER PREPARATION REQUEST
S6311
IMAGE TRANSFER PREPARATION CONFIRMATION RECEIVED ?
NO
YES
S6312
SEND IMAGE TRANSFER REQUEST
S6313
TRANSFER IMAGE
S6314
IMAGE TRANSFER COMPLETION CONFIRMATION RECEIVED ?
NO
YES
S6315
TRANSMISSION PROCESS
S6316
MODULATE BY MODEM AND TRANSMIT TO LINE
END

ONBOARD SCANNER

FIG. 64

I/F IN HAND SCANNER OPERATION

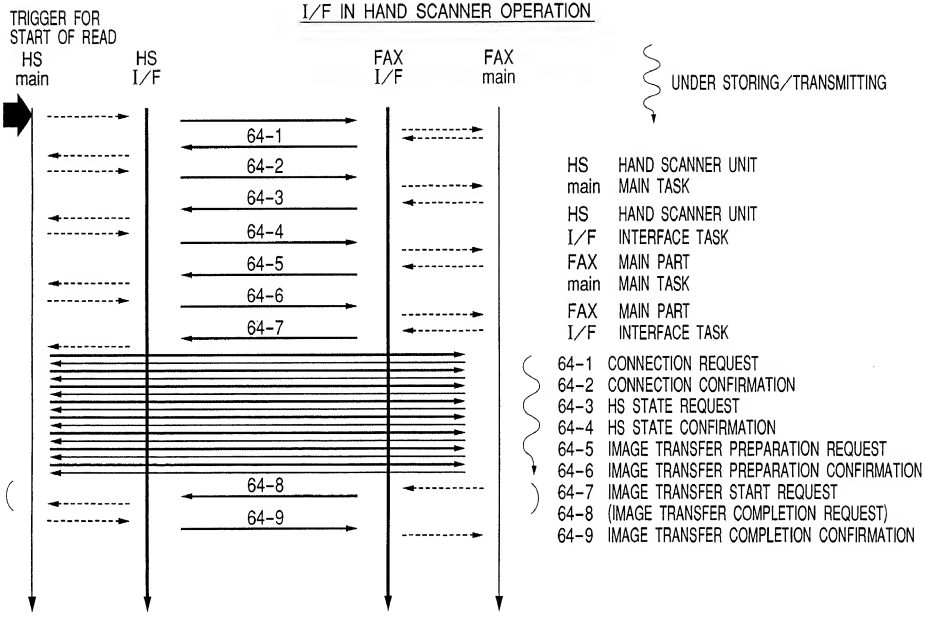


FIG. 65

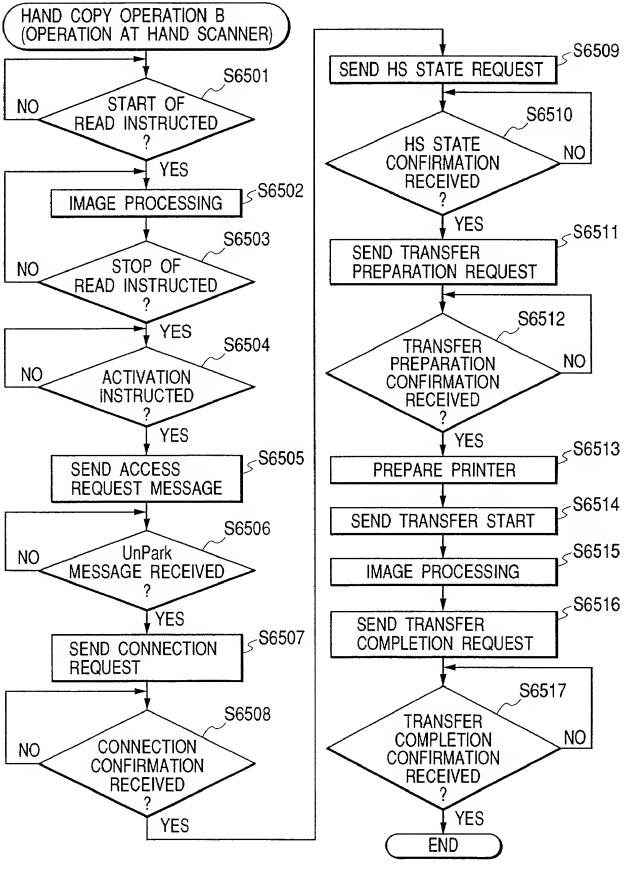

HAND COPY OPERATION B
(OPERATION AT HAND SCANNER)
S6501
START OF READ INSTRUCTED ?
NO
YES
S6502
IMAGE PROCESSING
S6503
STOP OF READ INSTRUCTED ?
NO
YES
S6504
ACTIVATION INSTRUCTED ?
NO
YES
S6505
SEND ACCESS REQUEST MESSAGE
S6506
UnPark MESSAGE RECEIVED ?
NO
YES
S6507
SEND CONNECTION REQUEST
S6508
CONNECTION CONFIRMATION RECEIVED ?
NO
YES
S6509
SEND HS STATE REQUEST
S6510
HS STATE CONFIRMATION RECEIVED ?
NO
YES
S6511
SEND TRANSFER PREPARATION REQUEST
S6512
TRANSFER PREPARATION CONFIRMATION RECEIVED ?
NO
YES
S6513
PREPARE PRINTER
S6514
SEND TRANSFER START
S6515
IMAGE PROCESSING
S6516
SEND TRANSFER COMPLETION REQUEST
S6517
TRANSFER COMPLETION CONFIRMATION RECEIVED ?
NO
YES
END

FIG. 66

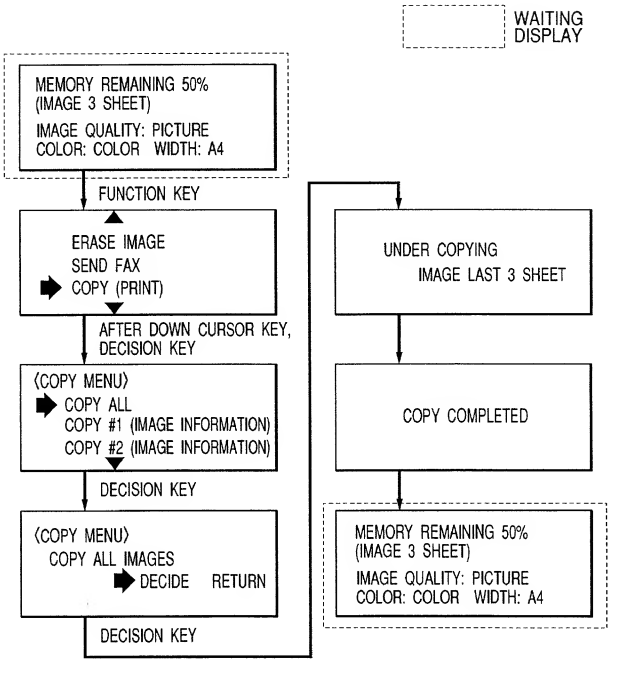

HAND COPY OPERATION
WAITING DISPLAY
MEMORY REMAINING 50%
(IMAGE 3 SHEET)
IMAGE QUALITY: PICTURE
COLOR: COLOR WIDTH: A4
FUNCTION KEY
ERASE IMAGE
SEND FAX
COPY (PRINT)
AFTER DOWN CURSOR KEY, DECISION KEY
〈COPY MENU〉
COPY ALL
COPY #1 (IMAGE INFORMATION)
COPY #2 (IMAGE INFORMATION)
DECISION KEY
〈COPY MENU〉
COPY ALL IMAGES
DECIDE RETURN
DECISION KEY
UNDER COPYING
IMAGE LAST 3 SHEET
COPY COMPLETED
MEMORY REMAINING 50%
(IMAGE 3 SHEET)
IMAGE QUALITY: PICTURE
COLOR: COLOR WIDTH: A4

FIG. 67

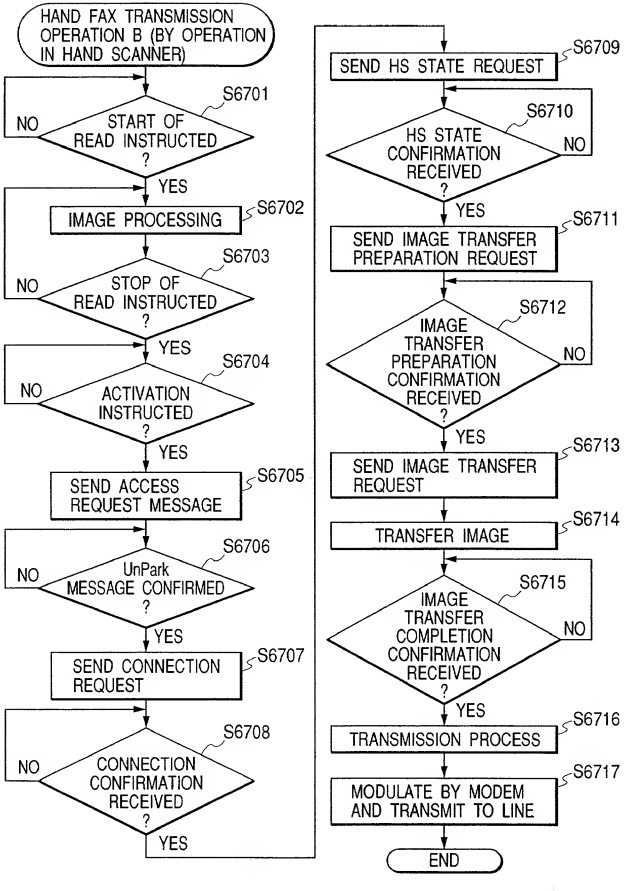

HAND FAX TRANSMISSION OPERATION B (BY OPERATION IN HAND SCANNER)
S6701
START OF READ INSTRUCTED ?
NO
YES
IMAGE PROCESSING
S6702
S6703
STOP OF READ INSTRUCTED ?
NO
YES
S6704
ACTIVATION INSTRUCTED ?
NO
YES
SEND ACCESS REQUEST MESSAGE
S6705
S6706
UnPark MESSAGE CONFIRMED ?
NO
YES
SEND CONNECTION REQUEST
S6707
S6708
CONNECTION CONFIRMATION RECEIVED ?
NO
YES
SEND HS STATE REQUEST
S6709
S6710
HS STATE CONFIRMATION RECEIVED ?
NO
YES
SEND IMAGE TRANSFER PREPARATION REQUEST
S6711
S6712
IMAGE TRANSFER PREPARATION CONFIRMATION RECEIVED ?
NO
YES
SEND IMAGE TRANSFER REQUEST
S6713
TRANSFER IMAGE
S6714
S6715
IMAGE TRANSFER COMPLETION CONFIRMATION RECEIVED ?
NO
YES
TRANSMISSION PROCESS
S6716
MODULATE BY MODEM AND TRANSMIT TO LINE
S6717
END

FIG. 68

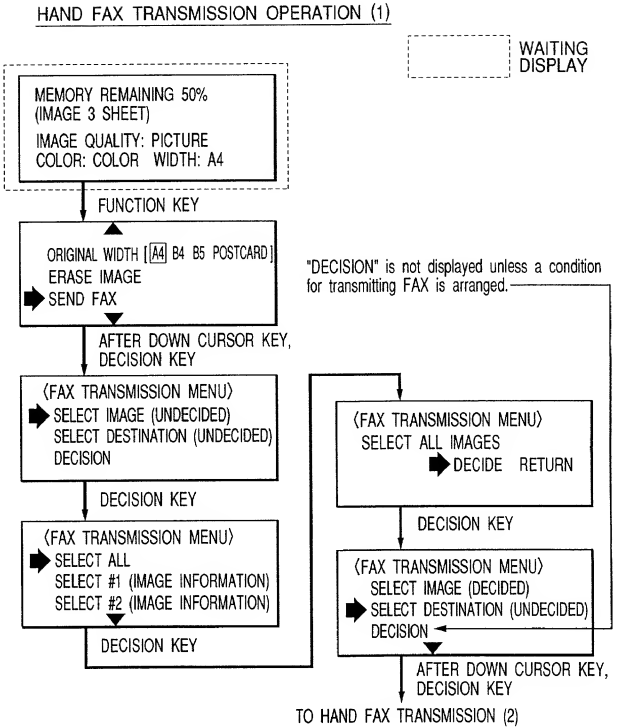

HAND FAX TRANSMISSION OPERATION (1)
WAITING DISPLAY
MEMORY REMAINING 50%
(IMAGE 3 SHEET)
IMAGE QUALITY: PICTURE
COLOR: COLOR WIDTH: A4
FUNCTION KEY
ORIGINAL WIDTH [A4] B4 B5 POSTCARD]
ERASE IMAGE
SEND FAX
"DECISION" is not displayed unless a condition for transmitting FAX is arranged.
AFTER DOWN CURSOR KEY, DECISION KEY
〈FAX TRANSMISSION MENU〉
SELECT IMAGE (UNDECIDED)
SELECT DESTINATION (UNDECIDED)
DECISION
DECISION KEY
〈FAX TRANSMISSION MENU〉
SELECT ALL
SELECT #1 (IMAGE INFORMATION)
SELECT #2 (IMAGE INFORMATION)
DECISION KEY
〈FAX TRANSMISSION MENU〉
SELECT ALL IMAGES
DECIDE RETURN
DECISION KEY
〈FAX TRANSMISSION MENU〉
SELECT IMAGE (DECIDED)
SELECT DESTINATION (UNDECIDED)
DECISION
AFTER DOWN CURSOR KEY, DECISION KEY
TO HAND FAX TRANSMISSION (2)

FIG. 69

HAND FAX TRANSMISSION OPERATION (2)

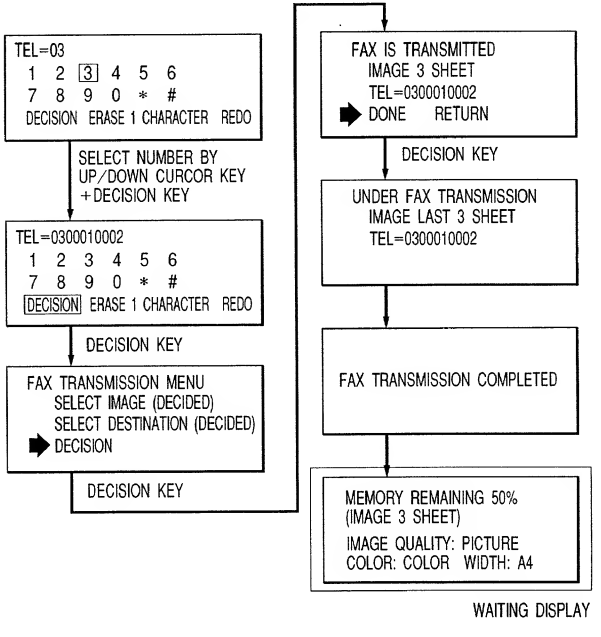


FIG. 70

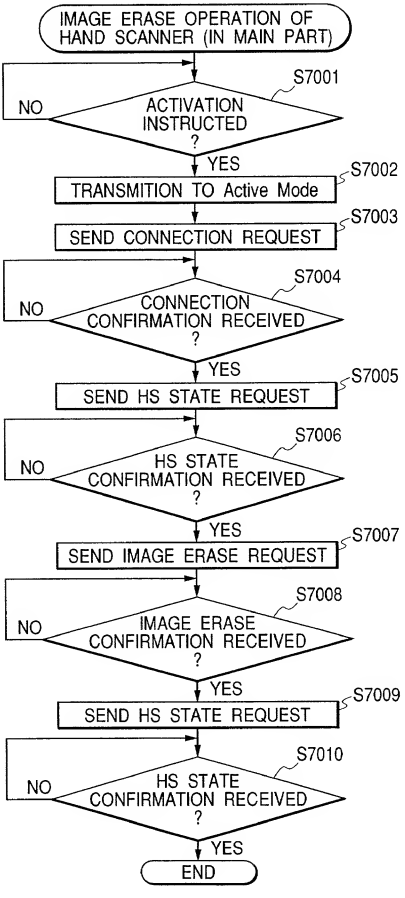


IMAGE ERASE OPERATION OF HAND SCANNER (IN MAIN PART)
S7001
NO
ACTIVATION INSTRUCTED ?
YES
S7002
TRANSMITION TO Active Mode
S7003
SEND CONNECTION REQUEST
S7004
NO
CONNECTION CONFIRMATION RECEIVED ?
YES
S7005
SEND HS STATE REQUEST
S7006
NO
HS STATE CONFIRMATION RECEIVED ?
YES
S7007
SEND IMAGE ERASE REQUEST
S7008
NO
IMAGE ERASE CONFIRMATION RECEIVED ?
YES
S7009
SEND HS STATE REQUEST
S7010
NO
HS STATE CONFIRMATION RECEIVED ?
YES
END

FIG. 71

I/F FOR ERASING IMAGE IN HS (HAND SCANNER) FROM MAIN PART

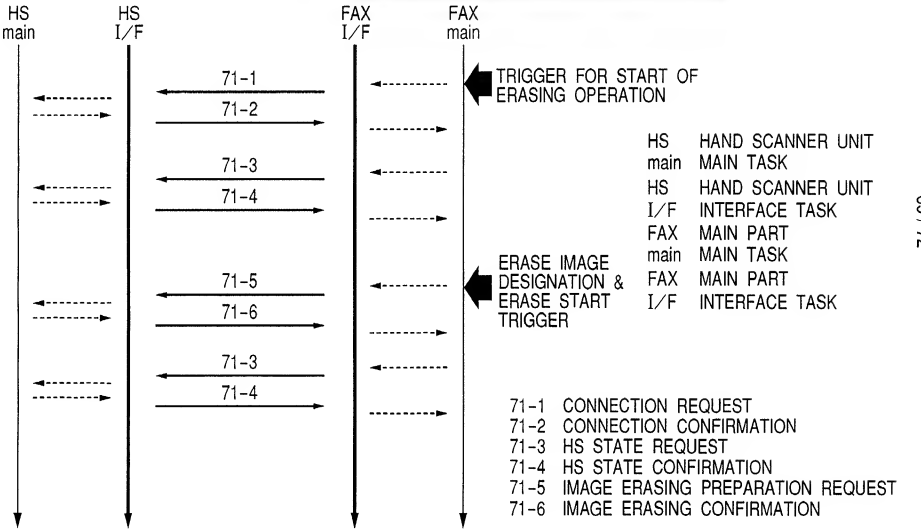


FIG. 72

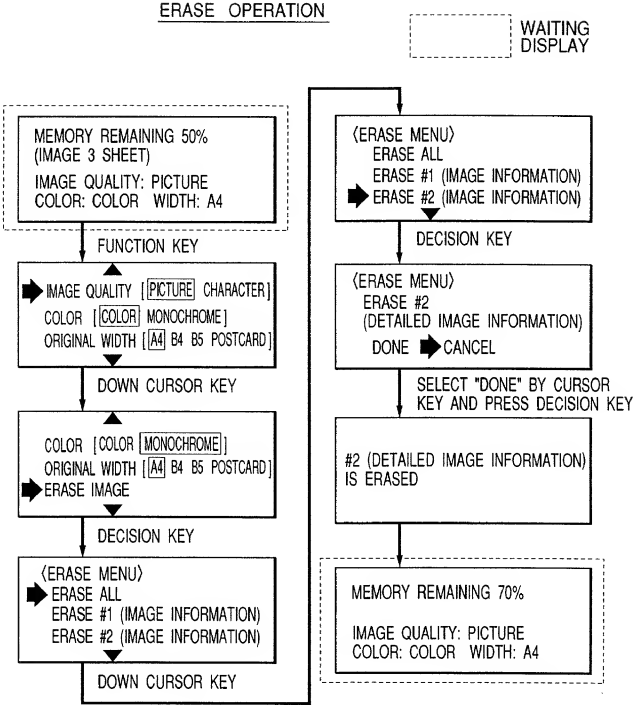

ERASE OPERATION
WAITING DISPLAY
MEMORY REMAINING 50%
(IMAGE 3 SHEET)
IMAGE QUALITY: PICTURE
COLOR: COLOR WIDTH: A4
FUNCTION KEY
IMAGE QUALITY [PICTURE CHARACTER]
COLOR [COLOR MONOCHROME]
ORIGINAL WIDTH [A4 B4 B5 POSTCARD]
DOWN CURSOR KEY
COLOR [COLOR MONOCHROME]
ORIGINAL WIDTH [A4 B4 B5 POSTCARD]
ERASE IMAGE
DECISION KEY
⟨ERASE MENU⟩
ERASE ALL
ERASE #1 (IMAGE INFORMATION)
ERASE #2 (IMAGE INFORMATION)
DOWN CURSOR KEY
⟨ERASE MENU⟩
ERASE ALL
ERASE #1 (IMAGE INFORMATION)
ERASE #2 (IMAGE INFORMATION)
DECISION KEY
⟨ERASE MENU⟩
ERASE #2
(DETAILED IMAGE INFORMATION)
DONE CANCEL
SELECT "DONE" BY CURSOR KEY AND PRESS DECISION KEY
#2 (DETAILED IMAGE INFORMATION) IS ERASED
MEMORY REMAINING 70%
IMAGE QUALITY: PICTURE
COLOR: COLOR WIDTH: A4

FIG. 73

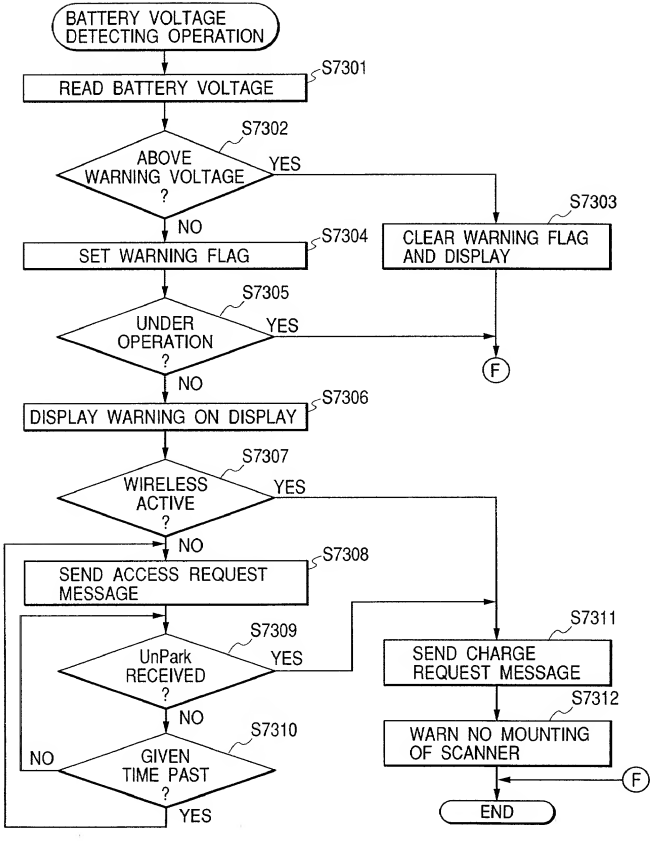
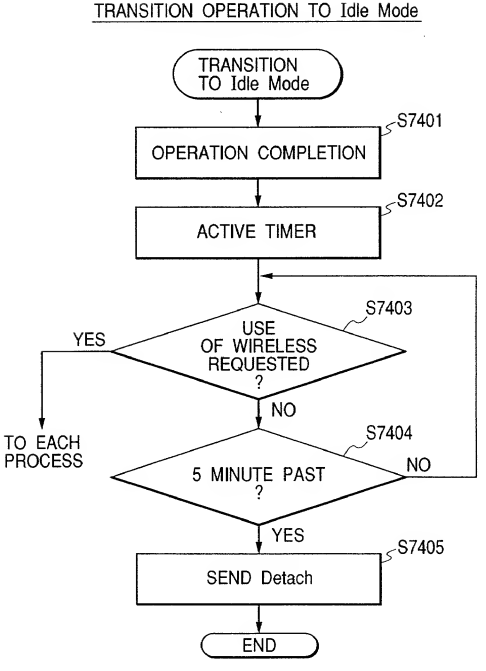

BATTERY VOLTAGE DETECTING OPERATION
READ BATTERY VOLTAGE
S7301
ABOVE WARNING VOLTAGE ?
S7302
YES
NO
CLEAR WARNING FLAG AND DISPLAY
S7303
SET WARNING FLAG
S7304
UNDER OPERATION ?
S7305
YES
NO
F
DISPLAY WARNING ON DISPLAY
S7306
WIRELESS ACTIVE ?
S7307
YES
NO
SEND ACCESS REQUEST MESSAGE
S7308
UnPark RECEIVED ?
S7309
YES
NO
GIVEN TIME PAST ?
S7310
NO
YES
SEND CHARGE REQUEST MESSAGE
S7311
WARN NO MOUNTING OF SCANNER
S7312
F
END

FIG. 74


TRANSITION OPERATION TO Idle Mode
TRANSITION TO Idle Mode
S7401
OPERATION COMPLETION
S7402
ACTIVE TIMER
S7403
USE OF WIRELESS REQUESTED ?
YES
NO
TO EACH PROCESS
S7404
5 MINUTE PAST ?
NO
YES
S7405
SEND Detach
END